

2003

Prepared by the Wisconsin Office of Rural Health



# Juneau County Community Health Needs Assessment

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# Part I: Methodology

The Wisconsin Office of Rural Health was contracted to complete this community health needs assessment by the Juneau County Health Department in the spring of 2002. The assessment was designed jointly by the two organizations to serve two primary functions: to fulfill state statues that require each county public health department to complete a new health plan every 5 years and to provide tangible health information to the local community.

The assessment is divided into seven sections:

Part I: Methodology

Part II: Demographic and Economic Profiles

Part III: Review of Past Assessments

Part IV: Health Care Priorities

Part V: Community Prioritization Process

Part VI: Summary

Part VII: Recommendations

Part VIII: References

Appendix A: Healthy People Juneau County

Appendix B: Partners in Agricultural Health Report for Juneau County

<u>Part II: Demographic and Economic Profiles</u> was completed using secondary data analysis. Part II relies heavily on data from the 2000 US Census, Wisconsin Department of Health and Family Services Reference Center, and Wisconsin Department of Workforce Development. While the Demographic and Economic Profiles are designed as general overviews of the county, there is a focus on data that are directly relevant to the health of county residents.

<u>Part III: Review of Past Assessments</u> provides a context for this report, showing whether current health concerns are related to previously identified issues and activities. Inclusion of previous assessments ensures that past work can be integrated into present planning and actions. This section includes summaries of community assessments that were completed in the past five years in Juneau County (1997-2002). The assessments were obtained through the Public Health Department. Several assessments were also completed in Juneau County between 1990 and 1997, and these are listed for the readers' information. Finally, this section compares purposes and data collection methods for the assessments and provides an overview of common themes.

<u>Part IV: Health Care Priorities</u> provides secondary data analysis of the eleven health priorities/ risk factors that were identified in the <u>Healthiest Wisconsin 2010</u>: A <u>Partnership Plan to Improve the Health of the Public</u>, i.e., the Wisconsin Health Plan. The eleven health priorities are:

- 1. Access to primary care and preventative health services
- 2. Adequate and appropriate nutrition

- 3. Alcohol and other substance use and addiction
- 4. Environmental and occupational health hazards
- 5. Existing, emerging, and re-emerging communicable diseases
- 6. High-risk sexual behavior
- 7. Intentional and unintentional injuries and violence
- 8. Mental health and mental disorders
- 9. Overweight, obesity, and lack of physical activity
- 10. Social and economic factors that influence health
- 11. Tobacco use and exposure

Each chapter contains a definition of the risk factor, morbidity and/or mortality data on health conditions that might result from the risk factor, and whether or not the risk factor has been identified in previous county level assessments. Additional information includes county activities related to the risk factor, or other data that are commonly linked to the risk factor.

The chapters were designed to be useable as "stand-alone documents," that is, mini documents that are independent from the rest of the report that can be used as short informational pieces by themselves.

<u>Part V: Community Prioritization Process</u> describes the process through which community leaders selected three health priorities to help direct the work of the Juneau County Health Department. The process was facilitated through the local health department.

<u>Part VI: Summary and Part VII: Recommendations</u> provide an overview of significant issues identified through the secondary data analysis and review of previous assessments completed for the purpose of this report, as well as potential next steps. These sections are intended to provide the reader with a synopsis of the report and a starting point for his or her own interpretation of the prominent issues.

<u>Part VIII: Reference List</u> provides a comprehensive list of the sources of secondary data used in this report. Because data are updated on a regular basis, and resources change, this list can be useful for those who wish to verify data or check for updates.

<u>Geographical Regions Compared in the Secondary Data Analyses</u> in Parts II and IV correspond to the geographical areas used for collecting the data. In most cases, county-level data are compared to regional, state, national, or peer county data.

In Part IV, data are also reported by comparing actual occurrences with expected or predicted occurrences. For example, the actual number of deaths due to lung cancer is compared to the expected number of deaths due to lung cancer.

The four major types of comparisons are described below.

- 1. <u>County vs. regional vs. state comparison</u>. The State of Wisconsin collects health data at the regional level, in addition to the county and state levels. The state is divided into five regions for this purpose: the northern, northeastern, southeastern, southern and western regions. Because Juneau County is part of the southern region, southern region data are included in this report for the purpose of comparison. The counties in the southern region are listed here.
  - Southern region Adams, Columbia, Crawford, Dane, Dodge, Grant, Green, Iowa, Juneau, Lafayette, Richland, Rock, and Sauk.
- <u>County cluster vs. regional vs. state comparison</u>. Data were also collected for Juneau County as part of a three-county cluster, which includes Juneau, Adams, and Sauk County in the <u>County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998 (Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001) Data from this document are reported for the three-county cluster.
  </u>
- 3. <u>County vs. peer counties vs. nation comparison</u>. Data for the <u>Juneau County Wisconsin Community Health Status Report</u> (US Department of Health and Human Services, Health Resources and Services Administration, 2000) compares county health data to national data and to peer county data. Peer counties are those counties with similar population size and density, poverty, and age structure. Data from this document are reported in comparison to peer counties and the nation. Peer counties for Juneau County are:

Plumas County, CA Bear Lake County, ID Greene County, IL Mason County, IL Perry County, IL Richland County, IL Wabash County, IL Allamakee County, IA Buchanan County, IA Crawford County, IA Davis County, IA Delaware County, IA Harrison County, IA Howard County, IA Jackson County, IA Atchison County, KS Franklin County, KS Jackson County, KS Kingman County, KS Rice County, KS

Fillmore County, MN Hubbard County, MN Kanabec County, MN Mille Lacs County, MN Pennington County, MN Pine County, MN Pope County, MN Red Lake County, MN Renville County, MN Watonwan County, MN Wilkin County, MN Audrain County, MO Barton County, MO Moniteau County, MO Monroe County, MO Ralls County, MO Antelope County, NE Boone County, NE Burt County, NE Nance County, NE

Red Willow County, NE Kingfisher County, OK Wasco County, OR Brule County, SD Grant County, SD Hamlin County, SD Hanson County, SD Moody County, SD Austin County, TX Hutchinson County, TX Lee County, TX Ashland County, WI Crawford County, WI Forest County, WI Jackson County, WI Juneau County, WI Langlade County, WI Richland County, WI

4. <u>Actual vs. expected morbidity and mortality comparison</u>. The state reports data based on the actual versus the expected prevalence of disease and deaths from diseases for each county. Data from these sources are reported in actual compared to expected cases.

*NOTE:* Rates, which have been calculated using common denominators, are reported in many sections in order to compare areas with varying population sizes appropriately. Rates based on fewer than 20 cases, however, are considered unreliable. Sections that contain rates based on fewer than 20 cases are specified in the text.

<u>Appendix A – Healthy People – Juneau County</u>. As a follow-up to the Community Prioritization Process meeting held on October 3, 2002, the Assessment Protocol for Excellence in Public Health (APEX) Committee in Juneau County developed a workplan along with other community members and leaders. Members of the APEX Committee authored the introduction and workplan in Appendix A.

Appendix B – A Report on Farmers' Healthcare and Insurance and the Impact of the Partners in Agricultural Health Project. This report was completed by the Wisconsin Office of Rural Health as part of a separate project called Partners in Agricultural Health (PAH). PAH was supported by a federally funded Rural Health Outreach Grant and designed to address farmers' and agricultural workers' health and healthcare needs in Adams, Juneau and Sauk Counties. This report is included in Appendix B as an additional resource for Juneau County residents and health and healthcare professionals and because the Juneau County health department was significant partner in the project.

# **Part II: Demographic and Economic Profile**

# **Demographic Profile**

## **Population Characteristics**

According to the 2000 US Census, Juneau County has a population of 24,316. The county experienced a 12.3% rate of growth between 1990 and 2000. This is higher than the growth rate for the state of Wisconsin (9.6%) for the same period (US Census, State and County QuickFacts, 2000). The population gain in Juneau County is primarily the result of net migration, that is more people moving into the county than moving out of the county. The recent trend for retirees to move to Juneau County has contributed to the rapid population growth (Juneau County Workforce Profile, Wisconsin Department of Workforce Development, Bureau of Labor Market information and Customer Service 2000).

## Age

Of major significance is the increasing number of elderly in Juneau County and decreasing number of young adults. The table below shows that Juneau County has a higher percentage of people aged 65 and older than Wisconsin or the United States, and a lower percentage of adults aged 18-44. Additionally, the county's median age (39.4) is higher than the state and nation.

Age Profile 2000				
Juneau County		Wisconsin	US	
Age	Number	% Of Total	% Of Total	% Of Total
0-17	6,176	25.4%	25.5%	25.7%
18-44	8,146	33.5%	39.2%	39.9%
45-64	5,909	24.3%	22.2%	22.0%
65+	4,085	16.8%	13.1%	12.4%
Total	24,316	100.0	5,363,675	281,421,906
Median Age	39.4		36.0	35.3

Source: US Census American FactFinder, 2000

#### Race

Juneau County is predominantly white, non-Hispanic (95.6%). This compares to 87.3% white, non-Hispanic in Wisconsin, and 69.1% for the nation. Persons of Hispanic or Latino origin make up 1.4% of the county's population, and American Indian / Alaskan Native persons account for 1.3% of the population. Black or African American persons

and Asian persons each account for less than 1% of the local population (US Census, State and County QuickFacts, 2000).

## **Household Characteristics**

According to 2000 Census data, Juneau County has 9,696 households. Selected household characteristics are listed in the following table. Juneau County has a lower percentage of households with married couples and children than the state or nation and fewer households with single female parents and children.

Household Characteristics for 2000				
	Juneau County	WI	US	
Household containing married couple with children	22.1%	23.7%	32.8%	
Household containing single female parent with children	5.6%	6.2%	7.2%	
Household with no children	67.2%	66.1%	64.0%	
Householder living alone	26.0%	26.8%	25.8%	

Source: US Census 2000, Table DP-1, Profile of General Demographic Characteristics: 2000

# **Population Density**

Juneau County is less densely populated than the state overall. In 2000, Juneau County ranked 48<sup>th</sup> out of 72 Wisconsin counties in terms of population density, with 32 people per square mile. The state of Wisconsin had 97 people per square mile (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b). Peer counties, that is, counties with similar population size, poverty, age structure and population density, range between 7 and 57. This indicates that Juneau County falls in the middle range for Wisconsin but is less rural than similar counties in the US (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

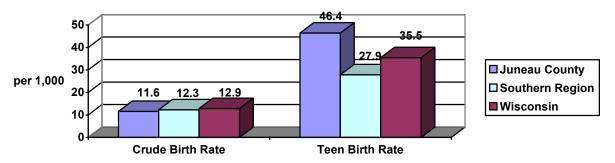
## **Birth Characteristics**

The average crude birth rate for Juneau County from 1996 to 2000 (11.6) was lower than the southern region's rate (12.3) and the state average (12.9).

The average general fertility rate for Juneau County from 1996 to 2000 (60.3) was higher than the southern region (54.6) and the state (58.5). And, the 5-year average teen birth rate for Juneau County (46.4) is considerably higher than that of the southern region (27.9) and the state (35.5).

The following graph shows birth and teen birth rate averages from 1996 to 2000 for Juneau County, the southern region, and the state.

Birth Characteristics - Average from 1996 to 2000



Source: Total Births and Birth Rates, Wisconsin Department of Health and Family Services Reference Center

# **Key Findings:**

- Fast population growth
- Aging population
- Low population density
- High fertility rate
- High teen birth rate

# **Economic Profile**

## **Employers, Industry, and Wages**

Juneau County's employment has historically depended heavily on the manufacturing industry, which accounted for over one-third of county jobs in the late 1990s. Eight of the 10 largest employers listed for county in 1999 were in the manufacturing industry (see list below).

Four of the largest employers closed, downsized or relocated in 2001, causing the county to lose 600 local jobs. This has had a significant impact on the economic well-being of the community (Wisconsin Department of Workforce Development, 2001) and (Anonymous2002).

Top 10 Private Sector Employers -1999				
Company	Product or Service	Size		
Walker Stainless Equipment (downsized in 2001)	Fabricated Plate Metal Products	250-499		
Best Power Systems (downsized and relocated in 2001)	Electronic Components	250-499		
Hess Memorial Hospital	General Hospital	250-499		
Farnam/Meillor Sealing Systems	Gaskets, Packing, Sealing Devices	250-499		
Brunner Drilling and Manufacturing	Fabricated Nut and Bolt Products	100-249		
Dumore Corp	Motors and Generators	100-249		
Parker Hannifin Corp	Power Valves and Hose Fittings	100-249		
Rayovac Corporation (closed in 2001)	Batteries	100-249		
Pick N Save Grocery Store	Grocery Store	100-249		
Brenner Tank Mauston (relocated in 2001)	Fabricated Plate Metal Products	100-249		

Source: (Wisconsin Department of Workforce Development, 2001) and (Anonymous2002).

Other industries are growing locally. Between 1993 and 1998, the Service Industry grew by over 25%, the largest growth in the county compared to other non-farm industries. Tourism is a significant part of the service sector for Juneau County where spending by tourists equaled \$2,592 per county resident in 1998. This is nearly twice the statewide average (\$1,451 per Wisconsin resident). Tourist spending added 1,838 jobs to total employment in the county. The Service Industry, however, accounted for only about 15% of county employment and 12% of wages in 1998.

By comparison, the manufacturing industry, which only grew by 5% between 1993 and 1998, accounted for 35% of total employment and 45% of wages in the county in 1998.

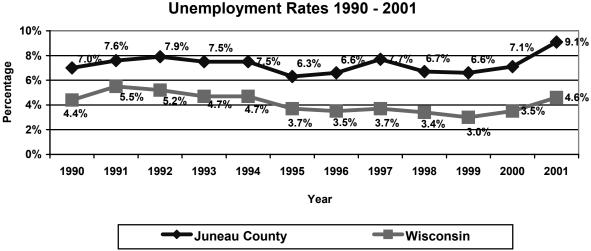
Manufacturing jobs tend to demand skilled production workers where the service industry employs larger numbers of unskilled workers. This accounts, in part, for the higher percentage of wages earned in the manufacturing industry in 1998. This also shows why the county's employment and wages were drastically affected when four of the largest manufacturing businesses in the county downsized, relocated and closed in 2001 (Juneau County Workforce Profile, Wisconsin Department of Workforce Development, Bureau of Labor Market Information and Customer Services) and (Anonymous2002).

## **Commuting**

According to 1990 Census data, approximately 1,700 people commuted into Juneau County for work and approximately 1,900 commuted from Juneau to other counties for employment. Juneau County, then, lost a net of 200 people to other counties for employment. This is probably due to the fact counties to the south tended to pay higher wages than Juneau for similar types of jobs (Wisconsin Department of Workforce Development, 2000).

## Unemployment

Juneau County's unemployment rate has been consistently higher than that of the state since 1990 as shown in the following graph. A recent news release from the Wisconsin Department of Workforce Development showed that Juneau County had the highest monthly unemployment rate of all Wisconsin counties at 13.4% in February 2002 (Department of Workforce Development, 2002). This is a direct result of the recent loss of 600 jobs in the county. The unemployment rate is predicted to decrease to approximately 11% in the near future, which is still extremely high in comparison to other counties in the state (Anonymous2002).

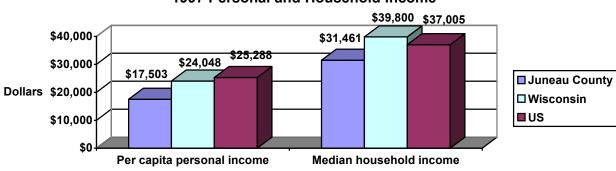


Source: LAUS Files, 2000, Bureau of Workforce Information, Department of Workforce Development and (Bureau of Workforce Information, 2001)

<sup>&</sup>lt;sup>1</sup> 1990 Census data is the most recent commuting data available.

#### **Income**

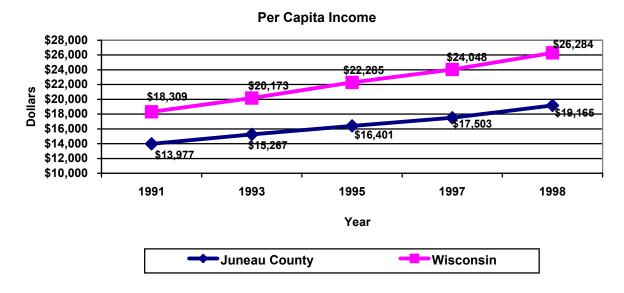
A snapshot of Juneau County in 1997 shows that the county had a personal per capita income of \$17,503, which was lower than the state and national averages at \$24,048 and \$25,288 respectively. Juneau County ranked 55<sup>th</sup> out of 72 Wisconsin counties in terms of personal per capita income, where 1 represents the county with the highest income and 72 is the county with the lowest income (Bearfacts for Juneau County, Regional Economic Information System, Bureau of Economic Analysis). Juneau County's 1997 median household income was also lower than the state and nation as shown in the graph below (US Census, State and County QuickFacts, 2000).



1997 Personal and Household Income

Sources: Bearfacts for Juneau County, Regional Economic Information System, Bureau of Economic Analysis and US Census, State and County QuickFacts, 2000

Although Juneau County's per capita income grew throughout the 1990s, it remained significantly below that of the state (see graph) (Wisconsin Council on Children and Families, 2000).



Source: (Wisconsin Council on Children and Families, 2000)

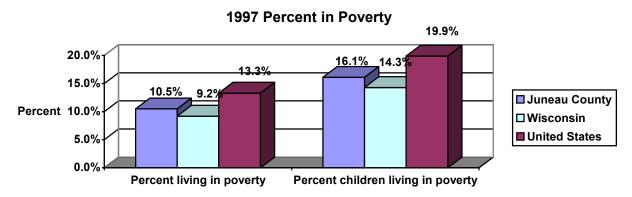
## **Labor force participation**

Labor force is defined as the number of residents aged 16 and older who are either working or looking for work. In 1998, the labor force participation rate in Juneau County was 60.3%, which was substantially lower than the state rate of 74.4% and the national rate of 67.1%. This means that nearly 40% of county residents aged 16 and older were not working and were not looking for work. In Wisconsin, there are only 4 counties with lower labor force participation rates.

People choose not to work for a variety of reasons such as retirement, inability to perform available work, physical incapacity, and the belief that no work for them is available. The low labor force participation rate in Juneau County is probably also a factor of the decreasing number of working age adults between 25 and 39. Between 1990 and 1998, this age cohort decreased by 4.3%, while the older age cohorts increased in population. Seasonal employment also affects the Juneau County labor force, which tends to expand in the spring as seasonal workers start searching for summer work (Juneau County Workforce Profile, Wisconsin Department of Workforce Development, Bureau of Labor Market Information and Customer Services, 2000).

## **Poverty**

Juneau County had a higher percentage of people living in poverty (10.5%) than the state as shown in the table below. Additionally, Juneau County had a higher percentage of children living in poverty than the state.

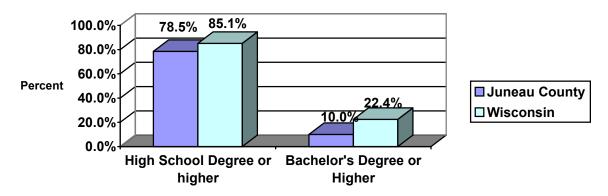


Source: US Census, State and County QuickFacts, 2000

#### Education

The percentage of people aged 25 years and over with a high school diploma or higher in Juneau County was 78.5% in 2000. This is lower than the state as shown in the following graph. The percentage of people aged 25 years and older with a bachelor's degree or higher in Juneau County (10.0%) was also lower than the state (22.4%) (US Census, 2000b).

## **Educational Levels 2000**



Source: (US Census, 2000b)

# **Key Findings:**

- High unemployment rates due to recent loss of 4 major employers
- Largest employers in the manufacturing industry
- Low personal and household income levels
- Low labor force participation rate
- High percentage of people living in poverty
- Low educational levels

# **Part III: Review of Past Assessments**

Assessments that were completed in the past five years in Juneau County are summarized in this section. The assessments were obtained through the Public Health Department. Of significance is the number of studies completed in the county in the past decade. While five were completed in the last five years, an additional five were completed in the early 1990s. The surveys completed prior to 1997, which are not included in this analysis, are listed here.

- Search Institute Profiles of Student Life: Attitudes and Behaviors Report (1992)
- Community Health Assessment in Rural Mauston, Wisconsin (1993)
- A Report to the Community of Mauston on Community Demographics and Health and Wellness Concerns and C.H.I.P. Goals (1993)
- Juneau County Community Health Profiles (1995)

## **Comparison of Community Needs Assessments**

Five needs assessments from Juneau County are reviewed in this section.

- Building Program for the Mauston Public Library (1995, revised 1997)
- Juneau County Family Preservation and Family Support Project (1997)
- Tri-County WIC Immunization Project (1997)
- Central Wisconsin Community Action Council Needs Assessment Survey (1998)
- Mauston School District Application for 21<sup>st</sup> Century Learning Center (2001)

**Purpose** – The reasons for completing the needs assessments varied. The "Building Program for the Mauston Public Library" was written to illustrate the need for additional library space and to provide a written description of the new library building to the architect and design team.

The "Juneau County Family Preservation and Family Support Project" was completed as part of the statewide Family Preservation and Support program and as part of the requirements for the county health department.

The "Tri-County WIC Immunization Project" was completed in order to increase the number of WIC clients with up-to-date immunizations.

The "Central Wisconsin Community Action Council Needs Assessment Survey" was completed in order to assess CAC client needs in comparison to the general population in a five-county region.

The "Mauston School District Application for 21<sup>st</sup> Century Learning Center" included a needs assessment to illustrate the need for a local community learning center.

**Data Collection** – The data collection methods also varied. The "Building Program for the Mauston Public Library" used secondary data, primary data from interviews and a survey, and specialized information on library building protocols.

The "Central Wisconsin Community Action Council Needs Assessment Survey" used a written survey administered in five counties to collect data.

The "Tri-County WIC Immunization Project" used secondary immunization data available at the county level for WIC clients.

The "Mauston School District Application for 21<sup>st</sup> Century Learning Center" used secondary data from local agencies and past assessments as well as primary data from a voice poll. (Postcards were sent out to local residents asking them to volunteer to call a telephone number to voice their opinion about the necessity of a learning center. This voice poll provided a snapshot of the local level of support for the project.)

The "Juneau County Family Preservation and Family Support Project" used secondary and primary data from community meetings throughout the county.

**Common Themes** – Common themes are identified below.

- 1. The lack of recreational activities for teens was identified as a priority in two assessments. The need for more recreational activities for teens was a major theme in the "Mauston School District Application for 21<sup>st</sup> Century Learning Center." It was one of the primary justifications for proposing a new community learning center. In the "Juneau County Family Preservation and Family Support Project", the need for more recreational activities for teens was also identified and linked to other teen health issues such as alcohol and other drug use and teen pregnancy.
- 2. Teen pregnancy was identified as a priority health issue in two assessments. Teen pregnancy was a major theme for the "Juneau County Family Preservation and Family Support Project" which developed specialized programming to support teen parents and to encourage them to avoid repeat pregnancies. Teen pregnancy was also identified as one of several health issues for the Mauston area in the "Mauston School District Application for 21<sup>st</sup> Century Learning Center."
- 3. Transportation was identified in two assessments as a major challenge for some local area residents. The "Central Wisconsin Community Action Council Needs Assessment Survey" identified transportation as one of several basic needs that CAC clients often lacked. Other basic needs included auto insurance, housing, telephone, and medicine. In the "Mauston School District Application for 21<sup>st</sup> Century Learning Center," transportation presented a significant barrier to youth who wish to participate in recreational activities because of the distance that most residents need to travel to access these activities.

- 4. Two assessments identified **family and parenting issues** as high priority areas. Both the "Juneau County Family Preservation and Family Support Project" and the "Mauston School District Application for 21<sup>st</sup> Century Learning Center" acknowledged that child abuse and domestic violence were prevalent in the community. Additionally, both assessments indicated that the breakdown of families and lack of parenting skills negatively affected children.
- 5. Two assessments noted that **services for aging population** in the area were important. The "Mauston School District Application for 21<sup>st</sup> Century Learning Center" showed that many senior citizens utilized local services such as a meal program and food pantry. This assessment proposed incorporating programming for seniors as part of the Community Learning Center activities. The "Building Program for the Mauston Public Library" document concluded that with an aging population, it was important to make library resources accessible to the elderly.
- 6. Poverty and a lack of well-paying employment options were identified in three assessments. The "Central Wisconsin Community Action Council Needs Assessment Survey" had the strongest focus on this issue. This study showed that poverty and lack of jobs in the area were major factors contributing to CAC clients' needs for assistance. The "Juneau County Family Preservation and Family Support Project" identified poverty, unemployment, and poor wages as underlying economic indicators that contribute to the severity of other local health needs. And, the "Mauston School District Application for 21<sup>st</sup> Century Learning Center" showed that Juneau County had a high level of poverty, low average household incomes, and high unemployment in comparison to the state.

# **Building Program for the Mauston Public Library**

The Building Program for the Mauston Public Library was originally written in 1995 and then revised in 1997 as part of the process of building a new local library. The purpose of the document is:

- 1. To illustrate the need for additional library space
- 2. To provide a written description of the library building which the Architect and Design Team are being asked to design

The document includes the histories of the city of Mauston and of the library itself. It also includes local demographic information from the early 1990s such as population trends, population projections, age of residents, and income levels. This section showed that 22.5% of the population in 1990 was aged 65 or older, indicating a need for library programming appropriate for seniors.

The document also includes lists of the problems of the current facility, statistics on library users, and needs for a new library. The bulk of the document describes in detail how each section of the library should be designed. Finally, the appendices include

results from the key informant interviews and a short survey. The interviews and survey were focused how the new library could meet community members' library needs. Health was not a topic covered in the questions or results.

# Juneau County Family Preservation and Family Support Project

The Juneau County Family Preservation and Family Support Project, completed in 1997, identified several health-related concerns. These were unemployment, poor wages, child abuse, teen pregnancy, recreation opportunities for teens, youth Alcohol and Other Drug Abuse (AODA) issues, domestic violence, break up of families, and poor parenting skills. From these concerns, four specific goals were developed. These are listed in the Family Preservation and Support Training Manual as:

- 1. Implement a home visitation program focusing on teen parents with the goal of preventing repeat pregnancies.
- 2. Mobilize the Family Resource Center, expanding the resources currently available to Juneau County families.
- 3. Work closely with the Birth to Three Coordinator with the Department of Human Services utilizing a "family unity" or strength-based family model and incorporate this model into the home visitation program.
- 4. Implement a series of training opportunities, in collaboration with the Family Living Agent with the University Extension, for families throughout Juneau County. Gear training toward specific audiences, i.e. teen parents, youth, fathers, etc. Subject matter can include AODA issues, teen pregnancy, legal issues (child support, welfare reform, underage sexual contact laws), stress management, positive discipline, self-esteem, strengthening families, child's play, positive parenting, etc.

A recent evaluation of the project showed that 128 families were referred between 1999 and 2001, and 102 families were served through the home visitation program. Forty-three percent of families referred (56) were teen parent families, and 3 teens (2%) in the program experienced second pregnancies within 2 years. Through the program, 1,122 home visits were made at an average of 9 visits per family. Seventy-five percent of cases referred were considered to have positive outcomes (Family Preservation and Support Cumulative Report Summary and Data, January 15, 2002).

## **Tri-County WIC Immunization Project**

The Tri-County WIC Immunization Project began in 1992 after a four-month review of immunization status of WIC clientele. Data from December 1991 to March 1992 showed that as many as 31% of WIC clients (47 of 106 in March 1992) were behind schedule on their immunizations. In order to improve immunization status, WIC staff began contacting clients and setting up appointments for immunizations at the same time as WIC check issuance. This proved an effective strategy. In 2000, Juneau County's immunization rate is 90% or higher depending on the specific immunization.

## **Central Wisconsin Community Action Council Needs Assessment Survey**

The Central Wisconsin Community Action Council Needs Assessment Survey was administered in Adams, Columbia, Dodge, Juneau, and Sauk Counties in 1998. The purpose was to assess Central Wisconsin Community Action Council's (CAC) client needs compared to the needs of the general population. Of the 297 surveys that were completed and analyzed, one-third of responses were from CAC clients and two-thirds were from the general public. Thirty-one responses were from Juneau County, comprising approximately 10% of all responses.

The survey report included a brief analysis of the economies of the five counties. Residents of these counties were found to have limited access to major employment centers and lower than average per capita earnings. Unemployment was low, but available jobs also tended to be low paying. Juneau County had the highest unemployment rate of the five counties in June 1998 (4.3%).

The survey showed that clients of CAC tended to lack basic needs more frequently than the general public. For example, CAC clients were more likely than the general public to lack the following necessities:

- Adequate food
- Auto insurance
- Housing

- Telephone
- Reliable transportation
- Medicine

CAC clients were more likely than the general public to have experienced eviction from rental units, mortgage foreclosure, sex discrimination, and racial, ethnic, or class prejudice. They were also more likely to have lost their jobs recently.

The survey report concluded that the problems of the clients were timeless. As some clients achieved self-sufficiency and left the program, new clients with similar problems replaced them. In order to continue to help clients achieve independence and leave CAC programs, the report recommended maintaining 3 basic goals.

- Assist clients with employment issues
- Assist clients with housing issues and homelessness
- Assist client with health issues including dental care and obtaining medicine

# Mauston School District Application for 21st Century Learning Center 2001

The Mauston School District applied for Federal Education Assistance funding for a 21<sup>st</sup> Century Learning Center in March 2001. As part of the application, a needs assessment was completed. This assessment included basic demographics, statistics related to the behavior and resources for school-aged children, results from a telephone poll, and a review of past surveys. The assessment concluded that a community learning center would fill a local need for more recreational activities for youth, more educational assistance for at-risk youth and families, and more resources for the elderly.

The assessment drew together data from a variety of resources including the following.

## Local government departments

- Mauston Police Department
- Juneau County Aging Unit

## Past Needs Assessments

- 1994 Health Care Project Analysis by Hess Memorial Hospital in Mauston
- Juneau County Family Preservation and Family Support Action Plan 1997
- 1993 Community Health Assessment in Rural Mauston by the University of Wisconsin Extension
- 1997 Needs Assessment by Mauston Public Library

## School District and Student Rating Tools

- Wisconsin Student Assessment System (WSAS)
- STAR Reading Comprehension
- Qualitative Reading Inventory
- Mauston School District Annual Report Cards 1997, 1998, and 1999
- 1999 School Readiness Committee Survey

## Voice Poll

2000 Mauston Voice Poll Survey on Need for a Community Learning Center

The demographic analysis focused on the economic status of residents, their education levels, and their age. These data, primarily from the early 1990s, reflected issues similar to those in Part II: Demographic and Economic Profile. Juneau County was shown to have low incomes, high unemployment, low wages, and low levels of education.

The analysis showed that 17% of Juneau County residents were aged 65 and older, which was a higher percentage than the state at 13%. Over 40% of very old seniors in the county (85 and older) lived alone, and 20% of the very old had incomes below poverty level. The assessment pointed to the high use of local services by seniors as evidence of their importance to the well-being of the local elderly community. For example, 943 seniors received meals through the local senior nutrition program in 1999, and a majority of the 500 families that used the Community Sharing Food Pantry in

1999 were seniors. Ongoing needs for seniors included adequate nutrition, companionship, and home upkeep for homeowners.

The assessment used data on the number of police citations involving minors in 1999 as evidence of the need for more local resources for youth. In 1999, 12% of the 2,244 police citations involved youth. Forty-six percent of those were for habitual truancy, and 48% for alcohol or drug-related incidents. Additionally, the assessment pointed out that there were few local recreational activities for youth. Children were reliant on their parents for transportation to activities, which can be a further barrier. Less than 25% of students in the school district enrolled in the city recreational summer programs, which may be partially due to transportation issues.

The assessment also used statistics about the performance of children and the school district as evidence that there was a need additional educational resources, particularly for economically disadvantaged children and children with disabilities. The assessment showed that on its district report cards for 1997, 1998, and 1999, Mauston School District's performance was not as good as the state in terms of graduation rate, dropout rate, and ACT comp scores. Results from the Wisconsin Student Assessment System showed that Mauston student scores were lower than state scores. Further, scores for economically disadvantaged children and children with disabilities were lower than scores for children who were not economically disadvantaged or disabled. And, local reading tests showed that children who read over the summer maintained and improved their reading skills by the following fall, compared to those who did not read during the summer.

Another issue affecting children's school and social performance may be family issues such as parenting and family violence. Juneau County was shown to have the highest rate of domestic violence of all counties in Wisconsin in 1999. And, a School Readiness Committee survey in 1999 implied that high-quality parenting and positive adult support and role models are major factors contributing to children's readiness and success in school.

Other issues identified across the various surveys were:

- More daycare
- Child and family abuse
- Teen pregnancy

- Youth AODA issues
- Break-up of families
- Access to health insurance

As further support for the community learning center, a voice poll was conducted in September 2000 in Mauston asking residents to respond to whether or not there was a need for a center. Of the 199 respondents, most supported the need for a community learning center. Parents of pre-school and school aged children focused on the need for children's recreational activities, educational programs, parenting programs, and family management training. Parents expressed a need for transportation and after school hours of operation. Senior citizens and adults without children also supported the idea

of a center that included activities for seniors such as gardening assistance, but this group did not express a need for transportation.

# **Parts IV: Health Care Priorities**

Part IV of this report provides information on the health priorities that were identified in *Healthiest Wisconsin 2010:* A *Partnership Plan to Improve the Health of the Public*, i.e., the Wisconsin Health Plan. The Wisconsin Health Plan is the result of a two-year process, known as Turning Point, which was partially funded by the Robert Wood Johnson Foundation. Through Turning Point, over forty public health experts developed a new ten-year public health plan for the state that both complies with state statutes and revises the statewide approach to and definition of public health.

A significant piece of the Turning Point process was to identify eleven health care priorities, or risk factors, which affect health conditions and disease for all Wisconsin residents. Each risk factor may affect several diseases (i.e., tobacco use and exposure influences the onset of lung cancer, asthma, and cardiovascular disease). And, each health condition is influenced by more than one overlapping risk factor (i.e., lung cancer may be caused by tobacco use and exposure as well as environmental and occupational exposures). The eleven health priorities are:

- 1. Access to primary care and preventative health services
- 2. Adequate and appropriate nutrition
- 3. Alcohol and other substance use and addiction
- 4. Environmental and occupational health hazards
- 5. Existing, emerging, and re-emerging communicable diseases
- 6. High-risk sexual behavior
- 7. Intentional and unintentional injuries and violence
- 8. Mental health and mental disorders
- 9. Overweight, obesity, and lack of physical activity
- 10. Social and economic factors that influence health
- 11. Tobacco use and exposure

The eleven sections in Part IV provide information on each of the health priorities/risk factors listed above. Each chapter contains a definition of the risk factor, morbidity and/or mortality data on health conditions that might result from the risk factor, and whether or not the risk factor has been identified in previous county level assessments. Additional information may include county activities related to the risk factor, or other data that are commonly linked to the risk factor.

The sections were designed to be useable as "stand-alone documents," that is, mini documents that are independent from the rest of the report and that can be used as short informational pieces by themselves. Therefore, much information is repeated from chapter to chapter.

Data reported here were collected in a variety of ways and are compared in a variety of ways.

- 1. <u>County vs. regional vs. state comparison</u>. The State of Wisconsin collects health data at the regional level, in addition to the county and state levels. The state is divided into five regions for this purpose: the northern, northeastern, southeastern, southern and western regions. Because Juneau County is part of the southern region, southern region data are included in this report for the purpose of comparison. The counties in the southern region are listed here.
  - **Southern region** Adams, Columbia, Crawford, Dane, Dodge, Grant, Green, Iowa, **Juneau**, Lafayette, Richland, Rock, and Sauk.

Differences between state and county data are considered significant if there was a statistically significant difference between the county and state data or if there were at least 20 cases in Juneau County and the difference between the state and county was at least five percentage points.

- <u>County cluster vs. regional vs. state comparison</u>. Data were also collected for Juneau County as part of three-county cluster, which includes Juneau, Adams, and Sauk County in the <u>County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998 (Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001) Data from this document are reported for the three-county cluster.
  </u>
- 3. <u>County vs. peer counties vs. nation comparison</u>. Data for the <u>Juneau County Wisconsin Community Health Status Report</u> (US Department of Health and Human Services, Health Resources and Services Administration, 2000) compares county health data to national data and to peer county data. Peer counties are those counties with similar population size and density, poverty, and age structure. Data from this document are reported in comparison to peer counties and the nation.

Peer counties for Juneau County are:

Plumas County, CA	Howard County, IA	Pine County, MN
Bear Lake County, ID	Jackson County, IA	Pope County, MN
Greene County, IL	Atchison County, KS	Red Lake County, MN
Mason County, IL	Franklin County, KS	Renville County, MN
Perry County, IL	Jackson County, KS	Watonwan County,
Richland County, IL	Kingman County, KS	MN
Wabash County, IL	Rice County, KS	Wilkin County, MN
Allamakee County, IA	Fillmore County, MN	Audrain County, MO
Buchanan County, IA	Hubbard County, MN	Barton County, MO
Crawford County, IA	Kanabec County, MN	Moniteau County, MO
Davis County, IA	Mille Lacs County, MN	Monroe County, MO
Delaware County, IA	Pennington County,	Ralls County, MO
Harrison County, IA	MN	Antelope County, NE

Boone County, NE
Burt County, NE
Nance County, NE
Red Willow County,
NE
Kingfisher County, OK
Wasco County, OR
Brule County, SD

Grant County, SD Hamlin County, SD Hanson County, SD Moody County, SD Austin County, TX Hutchinson County, TX Lee County, TX Ashland County, WI Crawford County, WI Forest County, WI Jackson County, WI Juneau County, WI Langlade County, WI Richland County, WI

4. <u>Actual vs. expected morbidity and mortality comparison</u>. The state also reports data based on the expected prevalence of disease and deaths from diseases for each county. Data from these sources are reported in actual compared to expected cases.

Differences between actual and expected data were considered significant if there was a statistically significant difference between actual and expected cases.

*NOTE:* Rates, which have been calculated using common denominators, are reported in many sections in order to compare areas with varying population sizes appropriately. Rates based on fewer than 20 cases, however, are considered unreliable. Sections that contain rates based on fewer than 20 cases are specified in the text.

# **Access to Primary Care and Preventative Health Services**

## **DEFINITION**

**Access** means that primary and preventative health care services are available and organized in a way that makes sense to individuals and families. Access means that people have the resources, both financial and non-financial, needed to obtain and use available services. Accessible health care includes an infrastructure supporting a range of health services with the capacity to reach diverse people and adapt to the specific access issues that differ in communities.

From *Healthiest Wisconsin 2010 Part I: A Partnership Plan to Improve the Health of the Public* by the Wisconsin Turning Point

Transformation Team, pg. 41

## **HEALTH INDICATOR DATA**

Turning Point principles suggest that access to primary and preventative health services is associated with several health conditions: AIDS/HIV, breast cancer, cerebrovascular disease (stroke), diabetes, homicide, infant mortality, lung cancer/COPD, pneumococcal infections, and suicide. Access to health care services can help prevent these conditions or can help make their consequences less severe.

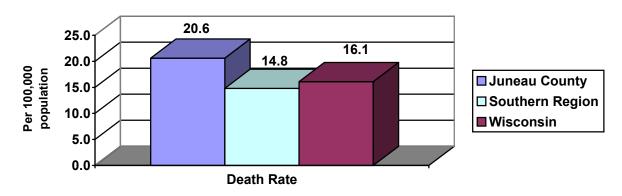
Breast Cancer, Cervical Cancer, Diabetes, Suicide, Blood Pressure Screening, and Prenatal Care in First Trimester are examined here as indicators of access at the local level.

## Breast Cancer

- Morbidity Juneau County had an average of 19 cases of breast cancer per year from 1992-1996. There were 17 cases of breast cancer in 1997, which is not significantly different than the number of expected cases (22) (Actual and Expected New Cancer Cases by Site, DHFS, Wisconsin Cancer Reporting System Wisconsin Bureau of Health Information AIM).
- Mortality There were 24 deaths due to breast cancer in Juneau County from 19951999. ). Although Juneau County's death rate per 100,000 (20.6) is higher than the
  region (14.8) or state (16.1) as shown in the following chart, the actual number of
  breast cancer deaths is not a statistically significant difference from the expected
  number (22) (Wisconsin Bureau of Information AIM, 1999b).

And, Juneau County's breast cancer mortality rate compared favorably to the Healthy People 2010 Target of 22.2 deaths per 100,000 and to peer counties for the years 1993-1997 (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

## **Breast Cancer Death Rates 1995-1999**



Source: (Wisconsin Bureau of Information AIM, 1999b)

#### Cervical Cancer

- Morbidity From 1992-1996, there was an average of 8 cervical cancer cases per year. There was a significant difference in the number of actual cases of cervical cancer (11) in Juneau County in 1997 and the expected number (3) (Actual and Expected New Cancer Cases by Site, DHFS, Wisconsin Cancer Reporting System Wisconsin Bureau of Health Information AIM).
- Mortality These were fewer than 5 deaths due to cervical cancer from 1993-1998 (Actual and Expected Mortality for Selected Chronic Conditions, DHFS, Resident Death Certificates, Wisconsin Bureau of Health Information).

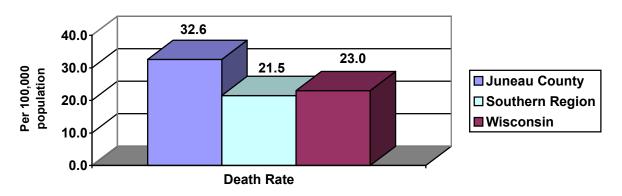
#### **Diabetes**

Morbidity – From 1993-1998, 5% of population over 18 in the three county area including Juneau County, Adams County, and Sauk County, had been told by a doctor that they had diabetes. This was not significantly different from the state of Wisconsin (5%) or the southern region (4%) (County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998, Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001).

But, there were significantly more hospitalizations due to diabetes (48) in 1998 than were expected (32) (Juneau County Number of Hospitalizations for Selected Chronic Conditions by Age, DHFS, Hospital Inpatient Database, Bureau of Health Information, 1998).

Mortality – There were also 38 deaths due to diabetes from 1995-1999, which is significantly higher than the expected number (33). And, Juneau County's diabetes mortality rate (32.6) was higher than the southern region (21.5) or the state (23.0) for the 5-year period as shown in the following chart (Juneau County 1995-1999 Death Files and Population Estimates, Wisconsin Bureau of Health Information AIM).

**Diabetes Death Rates 1995-1999** 

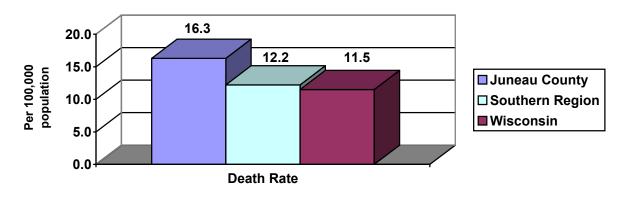


Source: (Wisconsin Bureau of Information AIM, 1999b)

Suicide – The Juneau County Wisconsin Health Status Report shows that Juneau County compares unfavorably to the nation and to peer counties in terms of its death rate due to suicide. Juneau County's 1993-1997 rate was 18.8 per 100,000 population (age –adjusted to the year 2000), compared to peer counties ranging from 3.6-22.0 (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

Local level data show that there were 19 deaths by suicide in Juneau County from 1995 to 1999, a rate of 16.3 per 100,000.<sup>2</sup> This rate is higher than the southern region and state as shown in the following chart (Wisconsin Bureau of Information AIM, 1999b). Recent reports show that 6 suicides in 1999 and 2000 were associated with firearms (Firearm Injury Center, 2001) and (Firearm Injury Center, 2002).

Suicide Rates 1995-1999

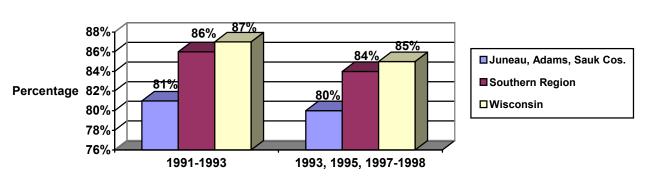


Source: (Wisconsin Bureau of Information AIM, 1999b)

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<sup>&</sup>lt;sup>2</sup> Rates based on fewer than 20 cases are not reliable according to the data source. The information is included here in order to compare county to regional and state rates.

Blood Pressure Screening – Blood pressure screening is a common preventative health service that can help individuals identify the onset of heart disease. Eighty percent of adults aged 18 and older in Juneau, Adams, and Sauk Counties had their blood pressure taken by a health care professional in the mid- and late 1990s. This compares to 84% in the southern region and 85% in Wisconsin. The percentages of those who had blood pressure screenings fell slightly for the county, region, and state from the early 1990s to the mid- and late 1990s as shown in the following table.



Adults 18 and Older Who Had Blood Pressure Screenings

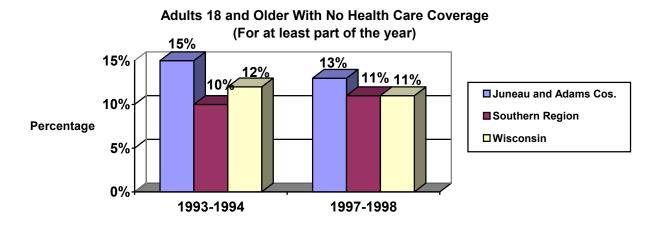
Source: County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998, Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001

*Prenatal Care in First Trimester* – From 1996-2000, 25.9% of pregnant women in Juneau County had no prenatal care in their first trimester. This compares unfavorably with the southern region and the state, which had 13.9% and 16% without care in the first trimester respectively (First Prenatal Care Visit, Wisconsin Department of Health and Family Services, Wisconsin Bureau of Health Information).

Juneau County also compared unfavorably to peer counties in the US for percentage of women with no care in the first trimester from 1993-1997. For these years, 25.5% of Juneau County pregnant women had no first trimester care compared to the peer county range of 12.1% to 27.9% (Juneau County Wisconsin Community Health Status *Report*, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

## RELATED DATA

Uninsured Individuals in Juneau County – Access to health care also can be measured in terms of uninsurance and medical care coverage. In the most recent uninsurance measure, Juneau County is coupled with Adams County in a two-county cluster. This measure showed that 13% of Juneau and Adams County residents were uninsured in 1997-1998. This was higher than the southern region (11%) and the state (11%) for the same time period as shown in the following chart.



Source: County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998, Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001

The *Family Health Survey* provides additional insight into uninsurance for the southern region. It shows that a higher percentage of southern region poor (under 100% of the Federal Poverty Level) and the near poor (100-199% of FPL) were uninsured for some time during the combined years of 1996-1998 than those who were not poor. Thirty percent of poor and 11% of near poor were uninsured in the 3-year period compared to 5% of the not poor <sup>3</sup> (Wisconsin Family Health Survey, 1996-1998 Combined File, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services).

Uninsurance in Wisconsin and the Nation – Recent studies have characterized Wisconsin's uninsured populations in order to gain insight into insurance barriers. While 4% of Wisconsin residents were uninsured for the entire year in 1999, 13% were uninsured for all or part of the year. Eighty percent of uninsured adults were employed, and 96% of uninsured children lived in a household with a working adult. Those without high schools diploma are twice as likely to be uninsured as those with high school diplomas (Frey, 2001). As with the southern region, poor Wisconsin families are more likely to be uninsured than non-poor families. Nearly 40% of poor and 23% of the near poor in Wisconsin were uninsured for part or all of 1999, compared to 7% of the non-poor (Bureau of Health Information, 2001b). Young adults (18-44) are more likely to be uninsured than older adults (45-64), but Medicare almost universally covers those 65 and older (Radant, no date).

Lack of insurance has several impacts on the health and well-being of a population. For example, uninsured women with breast cancer have higher death rates than those with

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<sup>&</sup>lt;sup>3</sup> The *Family Health Survey* for the combined years of 1996-1998 reported that 8% of southern region residents and 8% of state residents were uninsured for part of the 3-year period, which differs slightly from the results of the *Behavioral Risk Factors and Health Screening Practices Wisconsin* data.

insurance. And, the uninsured are hospitalized 50% more than insured persons for conditions such as pneumonia and uncontrolled diabetes (Radant, no date).

A study by the *Kaiser Commission on Medicaid and Uninsured* compares approximately 90 reports on the association between health insurance or medical care use and health outcomes. The study concludes that "having health insurance does lead to improved health by means of better access to medical care." The study focuses on three areas that are impacted by health insurance: specific disease outcomes, general health outcomes, and maternal-child health outcomes (Hadley, 2002a). Some of the results show that:

- Uninsured people with conditions such as breast cancer, colorectal cancer, cardiovascular disease, and trauma are 1 to 2 times more likely to die within a short time period than those with insurance
- Insurance coverage may improve infant birth weights and infant mortality rates
- Uninsured people are less likely to get preventative care, early diagnosis of chronic diseases, or therapeutic care after diagnosis, which leads to poor health outcomes
- Mortality rates for specific diseases among the uninsured would decrease by at least 5% if they were provided insurance because they would be more likely to receive appropriate care (Hadley, 2002b)

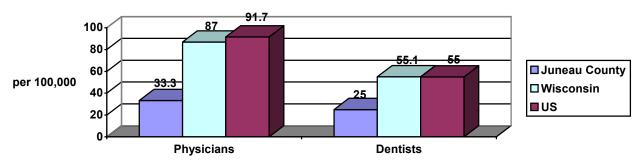
*Medicaid Coverage* – From 1998 to 2001, there was a monthly average of 2,232 Medicaid recipients in Juneau County. This included a monthly average of 902 persons with disabilities or who were elderly (Wisconsin Medicaid Recipients by County for Each Month and Year Currently Available 1998 to 2002, Wisconsin Department of Health and Family Services).

Primary Care Physicians and Dentists – There is a medical clinic in each community in Juneau except Lyndon Station and Camp Douglas. However, Juneau County falls below the state and national averages in work force population ratios for primary care physicians. Juneau County had 33.3 primary care physicians per 100,000 population in 1998. Wisconsin had 87 active primary care physicians per 100,000 in 1998, and the nation had 91.7.

Juneau County had 25.0 dentists per 100,000 population in 1998, which was lower than the state and national averages. There were 55.1 dentists per 100,000 population in Wisconsin in 1998, which was close to the national average of 55.0. Medicaid recipients have particular difficulty accessing dental care within the county. They must frequently travel long distances out of the county for dental care, which makes it challenging to establish a regular family dentist.

The graph below compares workforce population ratios for the county, state, and nation.

## **Work Force Population Ratios - 1998**



Sources: Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration 2000 and Health Resources and Services Administration State Profile of Wisconsin 1999

Health Professional Shortage Areas and Medically Underserved Areas – Three townships in the southwestern corner of Juneau County (Union Center Village, Wonewoc Town, and Wonewoc Village) are included in the Hillsboro Health Professional Shortage Area, which also includes portions of Monroe, Richland, Sauk, and Vernon Counties. All of Juneau County is designated as a Mental Health Professional Shortage Area. And, Juneau County has recently attained Dental Health Professional Shortage Area status.

Ten townships in Juneau County are designated as Medically Underserved Areas: Armenia Town, Camp Douglas Village, Clearfield Town, Cutler Town, Elroy City, Fountain Town, Germantown Town, Lyndon Station Village, Necedah Town, and Necedah Village (Wisconsin Health Professions Loan Assistance Programs Eligible Primary Care Practice Sites and Dental Health Professions Loan Assistance Programs Eligible Primary Care Practice Sites, Wisconsin Office of Rural Health).

*Vulnerable Populations* – Vulnerable populations may be at risk because of barriers to care, including the availability and access to health care providers. Vulnerable populations include people who are severely work-disabled, those suffering from major depression and recent drug users. In 1997, a total of 3,150 individuals fit into at least one of the three categories (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

*Preventable Hospitalizations* – Another indicator used to determine a population's access to health care is the number of avoidable or preventable hospitalizations. Preventable hospitalizations are defined as "hospitalization for conditions where timely and effective ambulatory care can reduce the likelihood of hospitalization." Juneau County's average rate from 1996 to 2000 was higher than the southern region and the state as shown in the table below.

Average Preventable Hospitalization Rate 1996-2000				
	Juneau County	Southern Region	WI	
Rate per 1,000	23.6	13.8	14.8	

Source: (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b)

The estimated cost of preventable hospitalizations in Juneau County, the southern region, and Wisconsin are provided in the table below. Juneau County's preventable hospitalization costs for 1996-2000 were lower per hospitalization but higher per capita than the region or state.

Preventable Hospitalization Costs -1996-2000				
	Juneau County	Southern Region	WI	
Cost per hospitalization	<b>\$5,943</b>	\$6,760	\$7,330	
Cost per capita	\$139	\$93	\$109	

Source: (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b)

## PREVIOUS ASSESSMENTS

Access to primary and preventative services was identified as a health need in the 1993 Community Health Assessment in Rural Mauston, Wisconsin. At that time, health insurance and ability to pay for services were identified as barriers to care. And, prenatal care was identified as a service that was not being accessed.

More recently, the Central Wisconsin Community Action Council (CAC) Needs Assessment Survey (1998) identified access as a priority. CAC clients faced barriers such as inability to pay for health services, dental services, and medicines. This survey linked access challenges with lack of well-paying jobs and lack of adequate transportation. The Mauston School District Application for the 21<sup>st</sup> Century Learning Center (2001) also identified access to health insurance as a local challenge.

## **Key Findings:**

- High breast cancer mortality rate compared to region and state
- High number of cervical cancer cases
- High diabetes mortality rate
- High suicide mortality rate
- Low percentage of residents 18 and older who had blood pressure screenings
- High percentage of pregnant women with no prenatal care in first trimester
- High rate of uninsured people
- Low number of primary care physicians and dentists
- Parts of county designated as a Health Professional Shortage Area and Medically Underserved Area
- Whole county designated as Mental Health Professional Shortage Area and Dental Health Professional Shortage Area
- High percentage of population considered 'Vulnerable'
- High rate of preventable hospitalizations

# **Adequate and Appropriate Nutrition**

#### **DEFINITION**

#### Adequate and appropriate nutrition has two dimensions:

- 1. Adequate nutrition refers to food security. This means Wisconsin residents have access at all times to nutritious and safe foods. They can obtain these foods in socially acceptable ways that is, through regular sources and not through emergency coping strategies such as food pantries.
- 2. Appropriate nutrition refers to food that promote overall good health. Nutritious foods contribute to the healthy birth outcome for pregnant women and the growth and development of growing infants and children. Nutritious foods, in appropriate amounts, help prevent many chronic diseases related to diet and weight.
  - From *Healthiest Wisconsin 2010 Part I: A Partnership Plan to Improve the Health of the Public* by the Wisconsin Turning Point Transformation Team, pg. 45

# HEALTH INDICATOR DATA

Turning Point principles suggest that adequate and appropriate nutrition is linked to breast cancer, cerebrovascular disease (stroke), diabetes, heart disease, infant mortality, and pneumococcal infections.

**Diabetes, Overweight, and Cholesterol Screenings** are examined here as indicators of nutrition at the local level.

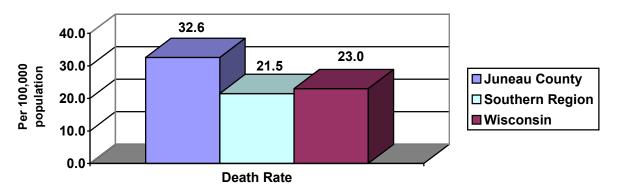
#### **Diabetes**

Morbidity – From 1993-1998, 5% of population over 18 in the three-county area including Juneau County, Adams County, and Sauk County, had been told by a doctor that they had diabetes. This was not significantly different from the state of Wisconsin (5%) or the southern region (4%) (County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998, Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001).

But, there were significantly more hospitalizations due to diabetes (48) in 1998 than were expected (32) (Juneau County Number of Hospitalizations for Selected Chronic Conditions by Age, DHFS, Hospital Inpatient Database, Bureau of Health Information, 1998).

 Mortality – There were also 38 deaths due to diabetes from 1995-1999, which is significantly higher than the expected number (33). And, Juneau County's diabetes mortality rate (32.6) was higher than the southern region (21.5) or the state (23.0) for the 5-year period as shown in the following chart (Juneau County 1995-1999 Death Files and Population Estimates, Wisconsin Bureau of Health Information AIM).





Source: (Wisconsin Bureau of Information AIM, 1999b)

Overweight – In Juneau, Adams, and Sauk Counties, 31% of the adults aged 18 and older were estimated to be overweight based on self-reported height and weight in 1993-1998. This is somewhat higher than the southern region, which reported 28% overweight, but not significantly different from the state, which also reported 31% (County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998, Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001).

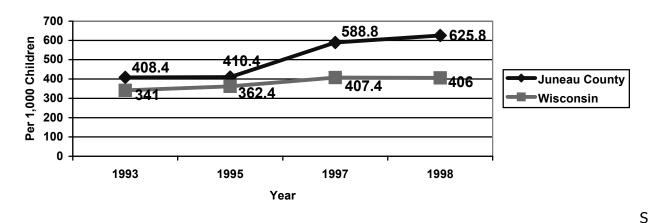
Cholesterol Screenings – The most recent measure from the combined years of 1993 and 1995-1998 shows that 63% of Juneau, Adams, and Sauk County residents 18 and older had their blood cholesterol levels measured within the past five years. This is less than the southern region (66%) and the state (65%) but not significantly different (County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998, Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001).

#### RELATED DATA

Women, Infants, Children (WIC) Services –WIC Services data are reported for Juneau County and Adams County as a two-county cluster. Juneau and Adams Counties had an annual average of 1,120 participants in the WIC program from 1996-2000 (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b).

The number of children aged 4 and under who received WIC Services increased between 1993 and 1998 in Juneau County. And, Juneau County's WIC usage per 1,000 children was higher than that of the state throughout the 1990s as shown in the following chart.

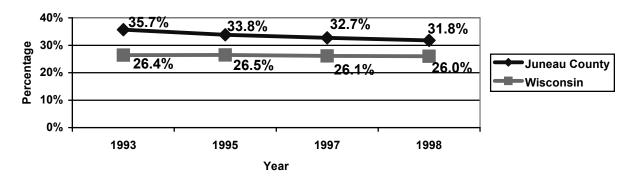
#### Children Receiving WIC Services 0-4



ource: 2000 WisKids Count Data Book

Free Lunch – The percentage of children enrolled in the public schools who were eligible for the free lunch program in Juneau County fell from 35.7% in 1993 to 31.8% in 1998. Free lunch eligibility in Juneau County was higher than the state in the 1990s as shown below (Wisconsin Council on Children and Families, 2000).

# Enrolled School Children Who Are Eligible for the Free Lunch Program



Source: 2000 WisKids Count Data Book

Local data from 2001, however, show that one-third to one-half of children in local schools are eligible for free or reduced lunch (see table below) (Wisconsin Department of Public Instruction, 2001).

Percentage of School Children Eligible for Free / Reduced Lunch From Selected Schools (2001)			
Lyndon Station Elementary School	53%		
West Side Elementary School	45%		
Necedah Elementary School	51%		
New Lisbon Elementary School	45%		
Wonewoc Elementary School	40%		
Elroy Elementary School	37%		

Source: (Wisconsin Department of Public Instruction, 2001)

Food Security – A recent survey showed that 43% of Juneau County WIC recipients were considered food insecure. This is higher than the southern region (41%) and slightly lower than the state (44%). Food insecure households do not always have a reliable source of food and might rely on emergency sources of food such as food pantries.

Seventeen percent of county WIC recipients surveyed were identified as households with hunger compared to 18% for the region and 19% for the state<sup>4</sup> (Wisconsin Department of Health and Family Services, 2002)

#### **PREVIOUS ASSESSMENTS**

The Central Wisconsin Community Action Council (CAC) Needs Assessment Survey (1998) showed that CAC clients lacked basic needs including adequate food more frequently than the general public.

The Mauston School District Application for the 21<sup>st</sup> Century Learning Center (2001) showed that local food resources were important to the well-being of senior citizens. Over 900 senior citizens received meals through the local senior nutrition program in 1999, and the majority of the 500 families that used the Community Sharing Food Pantry in 1999 were seniors.

### **Key Findings:**

High diabetes mortality rate

- Over 30% of county residents are overweight (self-reported)
- Over 60% of county residents had blood cholesterol levels measured in the past 5 years
- High rate of WIC participants compared to state
- High percentage of children eligible for school-based free /reduced lunch program
- High percentage of food insecurity among WIC recipients

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<sup>&</sup>lt;sup>4</sup> Survey respondents were identified as "food insecure" if they answered in the affirmative to 2 or more survey questions. They were identified with "hunger" if they answered 5 or more questions affirmatively.

# **Alcohol and Other Substance Use and Addiction**

#### DEFINITION

What is "inappropriate use?" According to the American Psychiatric Association (1994), inappropriate use is the use of a substance in a manner that exceeds the safe or prescribed amount and frequency or poses a health or safety risk to the user or others. Examples of inappropriate use include use during pregnancy, intoxicated driving, drinking to incapacitation, underage drinking, or heavy or immoderate drinking. It also includes the infrequent or experimental use of illegal street drugs.

What is "abuse?" The American Psychiatric Association (1994) has identified several disorders associated with the abuse of alcohol and other substances, namely:

- Abuse: Use resulting in a pattern of negative consequences such as school or work absences, neglect of children, legal problems, or heated arguments with spouse.
- Dependence: Use leading to a pattern of clinically significant impairment in at least 3 areas such as tolerance, withdrawal symptoms, inability to cut down or control use, or use despite physical or psychological problems. In addition to being a social disorder, dependency is also a physical disorder resulting in the progressive impairment of the body that affects performance of vital bodily functions such as the brain, liver, peripheral nervous system, pancreas, stomach, and heart. Recent research on addiction as a genetic and brain disease suggests that many addicts are strongly predisposed to having little control over their use.
- Dementia: Memory, language, emotional, or motor impairment and other cognitive deficits resulting from chronic substance abuse.
- What substances are included? In general, included substances are those that are considered to be habit-forming and mind-altering such as:
  - o Alcohol (e.g., beer, wine, hard liquor, coolers)
  - o Pain killers (e.g., opiates, heroin, dilaudid, codeine, morphine, oxycodone)
  - o Tranquilizers (e.g., muscle relaxants, diazepam, valium, flurazepam,
  - o meprobamate, equanil)
  - o Sedatives (e.g., sleeping pills, barbiturates, methaqualone, chloral hydrate)
  - Stimulants (e.g., cocaine, crack, speed, methamphetamine, ice, amphetamines, benzedrine, phendimetrazine)
  - o Hallucinogens (e.g., marijuana, LSD, PCP, psilocybin)
  - o Inhalants (e.g., glue, aerosols, solvents, nitrous oxide)
    - From *Healthiest Wisconsin 2010 Part I: A Partnership Plan to Improve the Health of the Public* by the Wisconsin Turning Point Transformation Team, pg. 49

#### HEALTH INDICATOR DATA

Turning Point principles suggest alcohol and other substance use and addiction are linked to AIDS/HIV, Cerebrovascular Disease (Stroke), Heart Disease, Homicide, Infant Mortality, Motor Vehicle Crashes, and Suicide.

AODA as the Underlying Cause of Death, Infant Mortality, Liver Disease, Mental Health, Suicide, and Homicide are examined here as indicators of alcohol and other substance use and addiction at the local level.

*Underlying Cause of Death* – Alcohol or other drug use was the underlying cause of death in 67 cases from 1996 to 2000 in Juneau County, an average of 13 per year. Nineteen of these deaths were due to alcohol-related motor vehicle accidents (Wisconsin Department of Health and Family Service Reference Center, 1996a-2000a).

Infant Mortality – Juneau County compared favorably to peer counties in terms of its infant mortality rate (per 1,000 live births) from 1993-1997. Juneau County's 1993-1997 rate was 4.2 compared to peer counties, which ranged from 2.6 to 10.6 (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

Juneau County's infant mortality rate was 4.3 for the 5-year period 1995-1999. This is lower than the southern region or state. There were 6 actual infant deaths in the 5-year period<sup>5</sup> (Wisconsin Bureau of Information AIM, 1999a).

# 8.0 6.0 4.3 Juneau County Southern Region Wisconsin

#### **Infant Mortality Rates 1995-1999**

Source: (Wisconsin Bureau of Information AIM, 1999a)

Liver Disease Mortality – There were 10 deaths due to chronic liver disease from 1995-1999 in Juneau County, which is not significantly different than the expected number of deaths. However, there were 18 deaths due to liver conditions other than chronic liver disease, i.e., pancreas from 1995-1999. This is significantly higher than the expected

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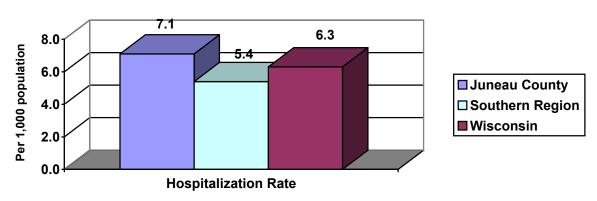
<sup>&</sup>lt;sup>5</sup> Rates based on fewer than 20 cases are not reliable according to the data source. The information is included here in order to compare county to regional and state rates.

number (11) (Juneau County 1995-1999 Death Files and Population Estimates, Wisconsin Bureau of Health Information AIM).

#### Mental Health

Morbidity – From 1996 to 2000, Juneau County had an average of 7.1 psychiatric hospitalizations (per 1,000 population) per year. For the same time period, the southern region's average psychiatric hospitalization rate was 5.4, and the state rate was 6.3 as shown below (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b).

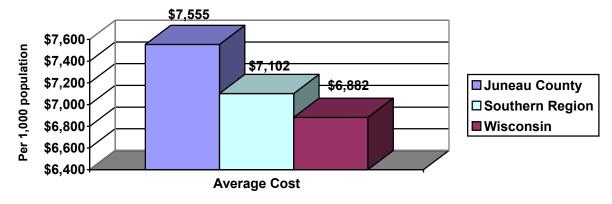
#### **Psychiatric Hospitalization Rates 1996-2000**



Source: (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b)

The average cost of psychiatric hospitalizations for Juneau County (\$7,555) was higher than the southern region (\$7,102) or state (\$6,882) for 1996 to 2000 as shown in the following chart. Juneau County's cost per capita for psychiatric hospitalization was \$54, also higher than the southern region (\$38) or the state (\$43) (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b)

**Average Cost for Psychiatric Hospitalizations 1996-2000** 



urce: (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b)

The *Juneau County Department of Human Service 2000 Annual Report to the County Board* reported the number of involuntary (i.e., court ordered) hospitalizations increased from an historical average of approximately 100 per year to 160 in 2000. This was a 60% increase in cases for the Department, which is very significant, as these cases tend to be very time intensive for the department staff. The following table lists the hospitalizations and placements that the department funded in 2000 (Juneau County Department of Human Service, 2000).

# 2000 Mental Health Hospitalizations and Placements Funded by the Juneau County Human Services Department

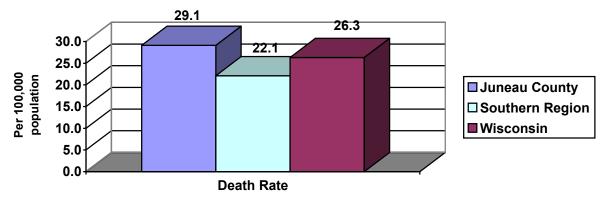
	Mental Health	AODA
Inpatient	50	10
Detoxification		19
C.B.R.F.	13	8
<b>Adult Family Home</b>	7	0

Source: (Juneau County Department of Human Service, 2000)

 Mortality – From 1995-1999, there were 34 actual deaths due to mental disorders, which is less than the number of expected deaths (38) but not significantly different (Juneau County 1995-1999 Death Files and Population Estimates, Wisconsin Bureau of Health Information AIM).

By comparing rates per 100,000 population, we see that Juneau County's death rate for mental disorders (29.1 per 100,000) was higher than the southern region's rate and the state's rate as shown in the following graph (Wisconsin Bureau of Information AIM, 1999b).

**Mental Disorder Death Rates 1995-1999** 

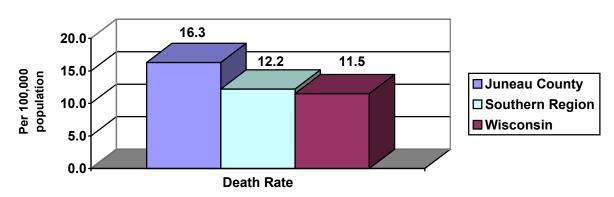


Source: (Wisconsin Bureau of Information AIM, 1999b)

Suicide – The Juneau County Wisconsin Health Status Report shows that Juneau County compares unfavorably to the nation and to peer counties in terms of its death rate due to suicide. Juneau County's 1993-1997 rate was 18.8 per 100,000 population (age –adjusted to the year 2000), compared to peer counties ranging from 3.6-22.0 (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

Local level data show that there were 19 deaths by suicide in Juneau County from 1995 to 1999, a rate of 16.3 per 100,000.<sup>6</sup> This rate is higher than the southern region and state as shown in the following chart (Wisconsin Bureau of Information AIM, 1999b). Recent reports show that 6 suicides in 1999 and 2000 were associated with firearms (Firearm Injury Center, 2001) and (Firearm Injury Center, 2002).

#### Suicide Rates 1995-1999

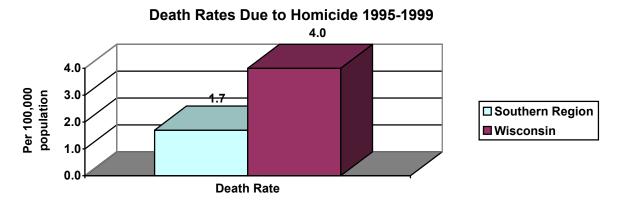


Source: (Wisconsin Bureau of Information AIM, 1999b)

Homicide – There were fewer than five homicides in Juneau County from 1995-1999. The death rate due to homicide for the southern region (1.7 per 100,000) was lower than the state rate (4.0 per 100,000) as shown in the chart below (Wisconsin Bureau of Information AIM, 1999b).

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<sup>&</sup>lt;sup>6</sup> Rates based on fewer than 20 cases are not reliable according to the data source. The information is included here in order to compare county to regional and state rates.



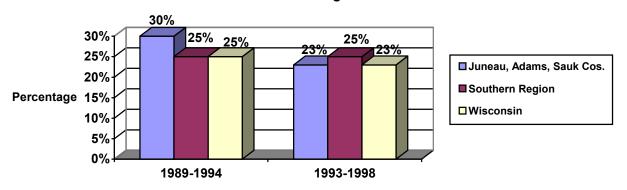
Source: (Wisconsin Bureau of Information AIM, 1999b)

#### RELATED DATA

Alcohol Consumption, Drinking and Driving, Alcohol Related Motor Vehicle
Accidents, and Inpatient Discharges for Alcohol and Other Drug Abuse are also
indicators of alcohol and other substance use and abuse.

Alcohol Consumption – The percentage of adults 18 and older who reported consuming 5 or more alcoholic drinks on one occasion in the past month (acute alcohol drinkers) decreased in Juneau, Adams, and Sauk Counties from the early 1990s to the late 1990s as shown in the table below. From 1993-1998, 23% of Juneau, Adams, and Sauk County residents 18 and older were acute alcohol drinkers, which was not significantly different from the state.

#### **Acute Alcohol Drinkers Aged 18 and Older**



Source: County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998, Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001

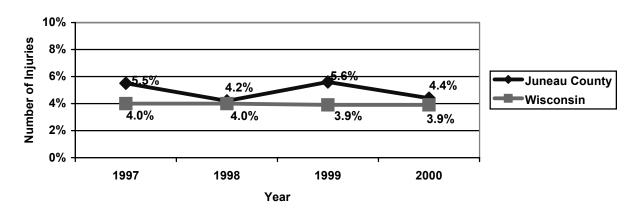
The percentage of adults aged 18 and older that were chronic alcohol drinkers (adults aged 18 and older who reported consuming 60 or more alcoholic drinks in the past month) for 1993-1998 in Juneau, Adams, and Sauk Counties was the same as the southern region and the state at 5%. The percentage for the Juneau County cluster dropped from 8% in 1989-

1994 (County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998, Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001).

Drinking and Driving – From 1993-1998, 6% of Juneau, Adams, and Sauk County residents 18 and older reported having driven after having too much to drink one or more times during the past month. This is not significantly different from the percentage reported for the counties in 1989-1994 (7%). Nor is it significantly different from the southern region or the state, which both reported 5% in 1993-1998 (County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998, Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001).

Data are also available for the percentage of drinking drivers in crashes for the county and the state. The most recent data show that Juneau County had higher percentages of drinking drivers in crashes than the state from 1997 to 2000 as shown in the following chart (Wisconsin Department of Transportation, 2002).

#### **Percentage of Drinking Drivers in Crashes**

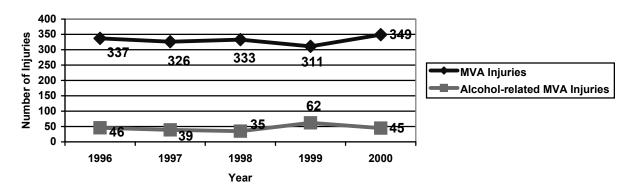


Source: (Wisconsin Department of Transportation, 2002)

*Motor Vehicle Accidents* – Juneau County compared favorably to peer counties in the US in terms of the rate of death by motor vehicle injury from 1993-1997. Juneau County's rate per 100,000 population was 22.1 compared to peer counties, which ranged from 17.1-43.3 (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

Raw data from the local level show that there was an average of 331 persons injured per year in motor vehicle accidents from 1996-2000. Fourteen percent of injuries in motor vehicle accidents during the 5-year period were alcohol-related. (See graph below)

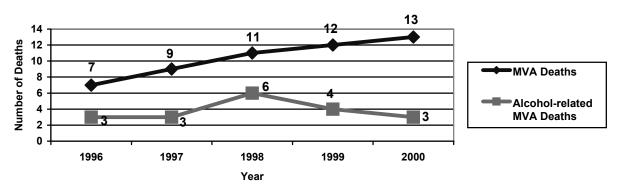
Persons Injured Due to Motor Vehicle Accidents (MVA)



Source: (Wisconsin Department of Health and Family Service Reference Center, 1996a-2000a)

During the same 5-year time period, an average of just over 10 people per year were killed in motor vehicle accidents in Juneau County, a total of 52 deaths. Over one-third of deaths in motor vehicle accidents in Juneau County from 1996-2000 were alcohol-related. (See graph below)

Persons Killed Due to Motor Vehicle Accidents (MVA)



Source: (Wisconsin Department of Health and Family Service Reference Center, 1996a-2000a)

Inpatient Hospital Discharges for Alcohol and Other Drug Abuse – In 1996, Juneau County ranked 40<sup>th</sup> out of 72 counties for the number of alcohol- and drug-related hospital discharges in the state (where 1 is the healthiest and 72 is the least healthy county). This ranking is considered relatively positive in comparison to other Wisconsin counties (Wisconsin County Population Health Check-Up, Wisconsin Network for Health Policy Research 1996).

# PREVIOUS ASSESSMENTS

The Juneau County Family Preservation and Family Support Project (1997) identified Alcohol and Other Drug Abuse as a health priority. AODA issues for teens were identified in the Mauston School District Application for 21<sup>st</sup> Century Learning Center (2001) as evidence

of the lack of alternative recreational activities. The 1993 Community Health Assessment in Rural Mauston, Wisconsin also identified AODA and drunk driving as health issues.

# **Key Findings:**

- Decreased percentage of acute alcohol drinkers
- High psychiatric hospitalization rate and high associated costs
- High mental health disorder mortality rate
- High suicide rate
- Over one-third of deaths in motor vehicle accidents related to alcohol

# **Environmental and Occupational Health Hazards**

#### **DEFINITION**

**Environmental and occupational health hazards** are defined as: *Exposure to toxic substances, noise, vibration and other hazardous agents in the environment or the workplace that can create or aggravate health conditions.* (Note: hazards that result in injury are considered in a separate health priority as "Intentional and Unintentional Injuries and Violence)

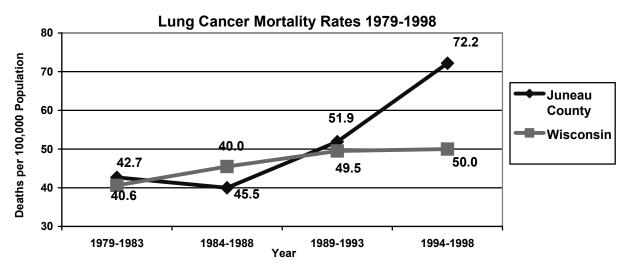
- From *Healthiest Wisconsin 2010 Part I: A Partnership Plan to Improve the Health of the Public* by the Wisconsin Turning Point Transformation Team, pg. 54

### **HEALTH INDICATOR DATA**

Turning Point principles suggest environmental and occupational health hazards are linked to AIDS/HIV, lung cancer/COPD, motor vehicle crashes, and pneumococcal infections.

**Lung Cancer, Asthma and Infectious Diseases** are examined here as indicators of environmental and occupational health hazards at the local level.

Lung Cancer Mortality – The lung cancer mortality rate in Juneau County increased by 69% from the early 1980s to the late 1990s. This represents a change from 42.7 deaths due to lung cancer (per 100,000 population) in the combined years of 1979-1983 to 72.2 deaths during 1994-1998. This compares to an increase of 23% for the state of Wisconsin as shown in the graph below. Only one Wisconsin county (Menominee County) had a higher lung cancer mortality rate than Juneau County from 1994-1998 (Trends in Wisconsin: A State and County Assessment of Tobacco Use, University of Wisconsin Comprehensive Cancer Center Report to the Wisconsin Tobacco Control Board 2001).



Source: Tobacco Trends in Wisconsin: A State and County Assessment of Tobacco Use, University of Wisconsin Comprehensive Cancer Center Report to the Wisconsin Tobacco Control Board 2001

Juneau County's death rate due to lung cancer from 1993-1997 was 64.6 per 100,000 population. This compared unfavorably with Juneau's peer counties, which ranged from 33.5 to 64.6 (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

A closer look reveals that Juneau County's average yearly death rate due to lung cancer (105.4 per 100,000 population) was over twice that of the southern region (47.3) or Wisconsin (50.9) from 1995-1999 (Wisconsin Bureau of Information AIM, 1999b).

# 120.0 100.0 100.0 80.0 60.0 40.0 20.0 Death Rate

#### **Death Rates Due to Lung Cancer 1995-1999**

Source: (Wisconsin Bureau of Information AIM, 1999b)

Comparing actual deaths to expected deaths due to lung cancer, there were 123 deaths from 1995-1999. This is significantly higher than the expected number (75) of cases (Juneau County 1995-1999 Death Files and Population Estimates, Wisconsin Bureau of Health Information AIM).

Asthma – Seven percent of the population under the age of 65 were reported to have asthma for the combined years of 1994-1998. This is the same as the region and state (Juneau County Percent Persons Reported to Have Selected Chronic Conditions, by Age Groups, Wisconsin Department of Health and Family Services – Reference Center).

Food and Water Borne Illnesses – From 1996-2000, there were 5 or fewer cases of campylobacter enteritis and salmonella each year. There were no cases of shigella for the 5-year period (Wisconsin Department of Health and Family Service Reference Center, 1996a-2000a).

### RELATED DATA

Air quality, water fluoridation and environmental contacts by the public health department are also indicators of environmental and occupational health.

*Water fluoridation* – Three public water systems in Juneau County are fluoridated. These are Elroy, Mauston, and Wonewoc.

Air Quality – Juneau County met the national air quality standards in 1998 for carbon monoxide, nitrogen dioxide, sulfur dioxide, ozone, particulate matter, and lead (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

Environmental Contacts by the Public Health Department – There was an average of 415 environmental hazard contacts per year from 1996-1999<sup>7</sup> in Juneau County, which is a rate of 177 per 10,000 population. This was higher than the regional rate (148) and state rate (102) for the same 4-year time period.

There was an average of 1,112 public health hazard contacts per year from 1996-1999 in Juneau County, which is a rate of 474 per 10,000 population. This was much higher than the regional rate (122) and the state rate (264) for the same 4-year time period.

# Per 10,000 300 Juneau County population 200 102 102 Southern Region Environmental Public Health Hazard Contacts Nuisance Contacts

**Environmental Contacts by the Public Health Dept 1996-1999** 

Source: (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b)

### PREVIOUS ASSESSMENTS

The assessments summarized in Part III of this report did not identify environmental or occupational health hazards as priorities. The 1993 Juneau County Community Health Assessment, however, identified Lyme disease and access to quality day care as environmental health issues.

### **Key Findings:**

- High lung cancer mortality rate
- High rate of environmental contacts by the public health department
- Only 3 water systems are fluoridated

<sup>7</sup>A four-year average (1996-1999) is given as environmental contacts do not appear in the 2000 Profiles.

# **Existing, Emerging, and Re-emerging Communicable Diseases**

#### **DEFINITION**

**Emerging communicable diseases** may result from changes in or evolution of existing organisms; or diseases that are known to occur in one setting may spread to new geographic areas or human populations. Previously unrecognized infections may appear in persons living or working in areas undergoing ecologic changes (e.g., deforestation) that increase human exposure to insects, animals, or environmental sources that may harbor new or unusual infectious agents. **Communicable diseases reemerge** by developing antimicrobial resistance (e.g., gonorrhea, pneumococci) or when the public health measures that originally brought them under control are reduced or eliminated (e.g., tuberculosis, and pertussis).

- From *Healthiest Wisconsin 2010 Part I: A Partnership Plan to Improve the Health of the Public* by the Wisconsin Turning Point Transformation Team, pg. 57

#### **HEALTH INDICATOR DATA**

Turning Point principles suggest that existing, emerging, and re-emerging communicable diseases are linked to AIDS/HIV, infant mortality, and pneumococcal infections.

AIDS/HIV infection, Sexually Transmitted Diseases, Food and Water Borne Illnesses and Pneumococcal Infections are examined here as indicators of communicable diseases at the local level.

AIDS/HIV infection – There were 6 cases of AIDS and 9 cases of HIV from 1982-2001 in Juneau County according to the Wisconsin AIDS/HIV Surveillance Summary. There were no reported deaths due to AIDS/ HIV infection from 1995-1999 in the county. Two deaths due to AIDS/HIV infection were expected for this 5-year period (Juneau County 1995-1999 Death Files and Population Estimates, Wisconsin Bureau of Health Information AIM).

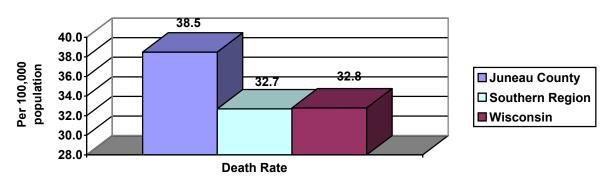
Sexually Transmitted Diseases – From 1996-2000, there were 116 reported cases of chlamydia trachomatis in Juneau County, an average of 23 cases per year. There were 40 cases of genital herpes, an average of 8 per year for the same 5-year period. And, there were fewer than 5 cases of gonorrhea each year from 1996-2000 (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b).

Food and Water Borne Illnesses – From 1996-2000, there were 5 or fewer cases of campylobacter enteritis and salmonella each year. There were no cases of shigella for the 5-year period (Wisconsin Department of Health and Family Service Reference Center, 1996a-2000a).

*Pneumococcal Infections* – There were 45 deaths due to pneumonia or influenza from 1995-1999, which was lower than the expected number (48) but not significantly different.

This equals a county rate of 38.5 per 100,000 population, which is higher than the regional rate (32.7) or the state rate (32.8) as shown in the next chart (Juneau County 1995-1999 Death Files and Population Estimates, Wisconsin Bureau of Health Information AIM).

#### **Pneumococcal Mortality Rates 1995-1999**



Source: (Wisconsin Bureau of Information AIM, 1999b)

#### **Key Findings:**

- Low number of deaths due to AIDS/HIV
- High rate of death due to pneumonia and influenza

# **High Risk Sexual Behavior**

#### DEFINITION

**High risk sexual behavior** is defined as: *Sexual behaviors, including unprotected sex,* that make someone more susceptible to infections or diseases, or that result in unintended pregnancy.

- From *Healthiest Wisconsin 2010 Part I: A Partnership Plan to Improve the Health of the Public* by the Wisconsin Turning Point Transformation Team, pg. 60

#### **HEALTH INDICATOR DATA**

Turning Point principles suggest high risk sexual behavior is linked to AIDS/HIV infection and infant mortality.

AIDS/HIV infection, Infant Mortality, Births to Teen, and Sexually Transmitted Diseases are examined here as indicators of high risk sexual behavior at the local level.

AIDS/HIV infection – There were 6 cases of AIDS and 9 cases of HIV from 1982-2001 in Juneau County according to the Wisconsin AIDS/HIV Surveillance Summary. There were no reported deaths due to AIDS/ HIV infection from 1995-1999 in Juneau County. Two deaths due to AIDS/HIV infection were expected for this 5-year period (Juneau County 1995-1999 Death Files and Population Estimates, Wisconsin Bureau of Health Information AIM).

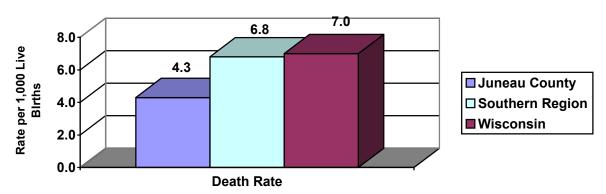
Infant Mortality – Juneau County compared favorably to peer counties in terms of its infant mortality rate (per 1,000 live births) from 1993-1997. Juneau County's 1993-1997 rate was 4.2 compared to peer counties, which ranged from 2.6 to 10.6 (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

Juneau County's infant mortality rate was 4.3 for the 5-year period 1995-1999. This is lower than the southern region or state. There were 6 actual infant deaths in the 5-year period<sup>8</sup> (Wisconsin Bureau of Information AIM, 1999a).

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<sup>&</sup>lt;sup>8</sup> Rates based on fewer than 20 cases are not reliable according to the data source. The information is included here in order to compare county to regional and state rates.



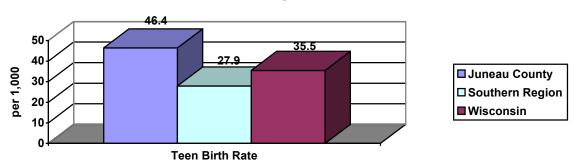


Source: (Wisconsin Bureau of Information AIM, 1999a)

Births to Teens – Approximately 14% of all births in Juneau County from 1995-1999 were to teen-aged women (under 20), compared to 10.6% for the state of Wisconsin (Prenatal Care, Low Birth Weight and Teen Births, 1995-1999 Birth Files and Population Estimates (AIM).

Juneau County's 5-year average teen birth rate from 1996-2000 was 46.4, which is higher than the southern region (27.9) and the state (35.5)<sup>9</sup> (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b).

Teen Birth Rates - Average from 1996 to 2000



Source: (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b)

Juneau County's 1999 teen birth rate was very high in relation to other Wisconsin counties. Juneau County's one-year birth rate for women under 20 was 47.7; only 6 other counties in the state had higher birth rates in this age category. Only 2 other counties had birth rates that were higher than Juneau County's for women ages 18-19. Juneau's rate for this age group was 90.2 (Bureau of Health Information, 2001a).

<sup>9</sup> Teen birth rate is defined as the number of births to teens aged 15-19 in a given year divided by the female population aged 15-19 (reported per 1,000).

Sexually Transmitted Diseases – From 1996-2000, there were 116 reported cases of chlamydia trachomatis in Juneau County, an average of 23 cases per year. There were 40 cases of genital herpes, an average of 8 per year for the same 5-year period. And, there were fewer than 5 cases of gonorrhea each year from 1996-2000 (Wisconsin Department of Health and Family Service Reference Center, 1996a-2000a).

#### PREVIOUS ASSESSMENTS AND PLANS MADE

Teen pregnancy was identified as a priority health issue in two assessments: the Juneau County Family Preservation and Family Support Project and the Mauston School District Application for  $21^{st}$  Century Learning.

Plans – After a thorough assessment process, the Juneau County Family Preservation and Family Support Project developed a home visitation program to serve families referred to FPS. The four primary goals were: 1) to initiate a home visitation program; 2) target pregnant and parenting teens; reduce the incidence of repeat teen pregnancies within a two-year timeframe; and 4) utilize the "family unity" model during home visits.

# **EVALUATION OF PROGRESS**

The home visitation program was established in February 1997and served 102 families (of 128 referred). Forty-three percent of families referred (56) were teen parent families, and 3 teens (2%) in the program experienced second pregnancies within 2 years. Through the program, 1122 home visits were made in the 2-year period at an average of 9 visits per family. Seventy-five percent of cases referred were considered to have positive outcomes (Juneau County Family Preservation and Support Cumulative Report Summary and Data, January 15, 2002).

#### **Key Findings:**

- High teen birth rate
- A successful program to assist teen parents and pregnant teens established in 1999

# **Intentional and Unintentional Injuries and Violence**

#### **DEFINITION**

**Injury** is defined as "any unintentional or intentional damage to the body resulting from acute exposure to thermal, mechanical, electrical, or chemical energy or from the absence of such essentials as heat or oxygen". There are two classifications of injuries:

- **Unintentional**, such as falls, burns, motor vehicle crashes, poisonings, and drownings.
- Intentional, violent injury, including suicide, homicides, and assaults such as sexual assault, intimate partner violence, child and elder abuse.

Injuries do not happen by chance. They follow a distinct pattern, like diseases. Injuries are predictable and preventable. Injury occurs because of the interaction of three sources—the host (injured person), the agent (form of energy), and the environment. In Wisconsin more than 2,600 and 2,700 people died from both unintentional and intentional injuries in 1997 and 1998 respectively, which accounted for 6 percent of all deaths. Injuries are the 3rd leading cause of death in the U.S and are the 4th highest category of death by underlying cause in Wisconsin, following cancer, diseases of the circulatory and respiratory systems.

- From *Healthiest Wisconsin 2010 Part I: A Partnership Plan to Improve the Health of the Public* by the Wisconsin Turning Point Transformation Team, pg. 63

# **HEALTH INDICATOR DATA**

Hospital Discharges Classified as Injuries, Poisonings, Suicide, Homicide, Child Abuse and Neglect, and Domestic Abuse are examined here in as indicators of intentional and unintentional injuries and violence at the local level.

<u>Hospital Discharges Classified as Injuries</u> – Hospital emergency room discharge data show that the leading three causes of injury for all age groups in Juneau County were falls, poisoning, and traffic accidents. There were 610 injuries due to falls, 146 due to poisonings, and 129 due to traffic accidents from 1995 to 1999. While the falls and traffic accidents were classified as unintentional, 107 or 73% of the poisonings were classified as intentional.

For children 18 and younger in Juneau County, there were 35 hospital discharges classified as injuries due to poisoning from 1995-1999. Thirty of the poisonings were intentional and occurred among children ages 10-18 years old. Twenty-nine injuries among children were due to traffic accidents, 26 due to falls, and 26 due to being struck (Wisconsin CODES Project, Center for Health Systems Research & Analysis).

Calls to the Wisconsin Poison Center – There were 278 calls from Juneau County to the Children's Hospital of Wisconsin Poison Center between January 2000 and April 2001, 255 of which involved human poisonings. Sixty-one percent of these calls were regarding

children ages 5 and under, which is similar to the percentage at the state level, 60.5%. And, 75% of all calls were managed at home with Poison Center counseling, compared to the state at 78.7% (Children's Hospital of Wisconsin Poison Center, no date).

Suicide – The Juneau County Wisconsin Health Status Report shows that Juneau County compares unfavorably to the nation and to peer counties in terms of its death rate due to suicide. Juneau County's 1993-1997 rate was 18.8 per 100,000 population (age –adjusted to the year 2000), compared to peer counties ranging from 3.6-22.0 (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

Local level data show that there were 19 deaths by suicide in Juneau County from 1995 to 1999, a rate of 16.3 per 100,000 <sup>10</sup> This rate is higher than the southern region and state as shown in the following chart (Wisconsin Bureau of Information AIM, 1999b). Recent reports show that 6 suicides in 1999 and 2000 were associated with firearms (Firearm Injury Center, 2001) and (Firearm Injury Center, 2002).

# 20.0 15.0 15.0 10.0 10.0 Death Rate

#### Suicide Rates 1995-1999

Source: (Wisconsin Bureau of Information AIM, 1999b)

*Homicide* – There were fewer than five homicides in Juneau County from 1995-1999. The death rate due to homicide for the southern region (1.7 per 100,000) was lower than the state rate (4.0 per 100,000) as shown in the chart below(Wisconsin Bureau of Information AIM, 1999b).

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<sup>&</sup>lt;sup>10</sup> Rates based on fewer than 20 cases are not reliable according to the data source. The information is included here in order to compare county to regional and state rates.

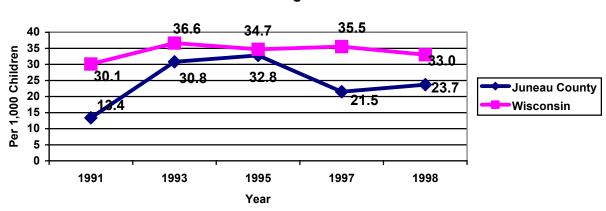


Source: (Wisconsin Bureau of Information AIM, 1999b)

Child Abuse and Neglect – In 1999, there were 139 allegations of child maltreatment in Juneau County or 21.7 per 1,000 population. This compares to the state allegation rate of 28.9 per 1,000 population. Of maltreatment allegations, 15.1% were substantiated in Juneau County, compared to 29.7% for the state.

Of allegations in 1999, 42 were for physical abuse; 25 were for sexual abuse; 75 for neglect; and 5 were for emotional abuse(Wisconsin Department of Health and Family Services, 1999).

An historical comparison shows that the county rates of child abuse and neglect reports were lower than the state rates throughout the 1990s (Wisconsin Council on Children and Families, 2000).



#### Child Abuse and Neglect Rates 1991-1998

Source: (Wisconsin Council on Children and Families, 2000)

The *Juneau County Department of Human Service 2000 Annual Report to the County Board* reported that the number of child abuse and neglect cases for the department rose by 25% between 1998 and 2000 (Juneau County Department of Human Service, 2000).

*Domestic Abuse* – There were 174 reported cases of domestic violence in 1998 in Juneau County. An historical comparison shows that the Juneau County rate of domestic violence incidents rose throughout the 1990s, exceeded the state rate in 1995 (Wisconsin Council on Children and Families, 2000).

12 9.5 9.5 8.8 9.9 10 Per 1,000 Adults 6.6 8 8.9 Juneau County 7.9 6 Wisconsin 2 0

1997

1998

1995

Year

**Domestic Violence Rates 1991-1998** 

Source: (Wisconsin Council on Children and Families, 2000)

1993

1991

According to Wisconsin Department of Justice data, Juneau County had the 7<sup>th</sup> highest percentage of reported domestic abuse (per 1,000 people) for all Wisconsin counties for the combined years of 1998 and 1999 (Wisconsin Department of Justice, 1998) and (Wisconsin Department of Justice, 1999).

The rate of domestic violence incidents in which children were present was higher for the county than the state in 1995 and 1998 as shown chart below (Wisconsin Council on Children and Families, 2000).

10 8 7.1 5.8 5.8 5.8 5.7 4.7 Juneau County Wisconsin

**Domestic Violence Rates -- Where Children Are Present** 

Source: (Wisconsin Council on Children and Families, 2000)

#### RELATED DATA

**Safety Belt Non-Use, Child Restraint Systems and Motor Vehicle Accidents** are also indicators of Intentional and Unintentional Injuries.

Safety Belt Non-Use – Fifty percent of Juneau, Adams, and Sauk County residents surveyed reported that they did not always wear their safety belts while driving or riding in vehicles in 1993, 1995, 1997. This is higher than the southern region and the state at 43% each. As the graph below shows, safety belt non-use decreased for the region and state between the early 1990s and mid- to late-1990s, but did not change significantly for Juneau, Adams, and Sauk Counties.

#### 50% 49% 50% 47%, 48% 48% ■Juneau, Adams, Sauk Cos. 46% **■** Southern Region 43% 43% Percentage 44% □Wisconsin 42% 40% 38% 1989-1993 1993, 1995, 1997

#### Safety Belt Non-Use Among Adults 18 and Older

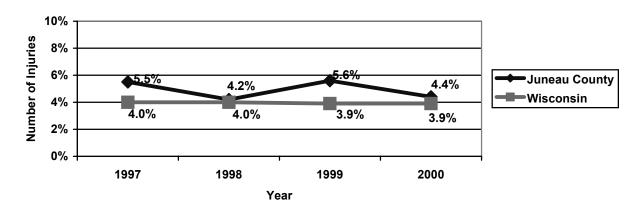
Source: County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998, Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001

Child Restraint Systems – In 2001, the Juneau County Health Department and the Sheriff's Department initiated a Child Passenger Safety Program. Representatives from the two agencies inspected 34 infant and child car seats in 2001. Of these, 32 had installation errors, and 6 were unusable. Motor vehicle crashes account for nearly 42% of all unintentional childhood injury-related deaths (0-14) in the United States (Juneau County Health Department, 2001).

*Motor Vehicle Accidents* – Juneau County compared favorably to peer counties in the US in terms of the rate of death by motor vehicle injury from 1993-1997. Juneau County's rate per 100,000 population was 22.1 compared to peer counties, which ranged from 17.1-43.3 (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

Data are also available for the percentage of drinking drivers in crashes for the county and the state. The most recent data show that Juneau County had higher percentages of drinking drivers in crashes than the state from 1997 to 2000 as shown in the following chart (Wisconsin Department of Transportation, 2002).

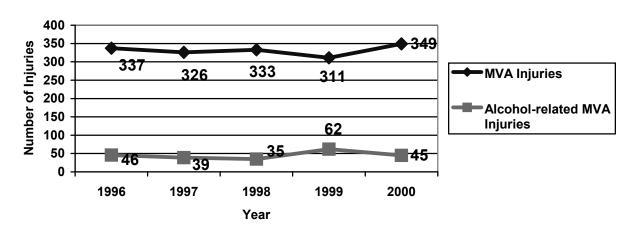
**Percentage of Drinking Drivers in Crashes** 



Source: (Wisconsin Department of Transportation, 2002)

Raw data from the local level show that there was an average of 331 persons injured per year in motor vehicle accidents from 1996-2000. Fourteen percent of injuries in motor vehicle accidents during the 5-year period were alcohol-related. (See graph below)

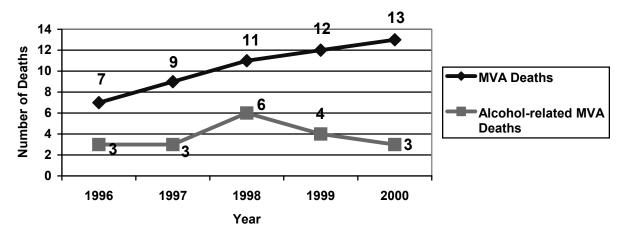
Persons Injured Due to Motor Vehicle Accidents (MVA)



Source: (Wisconsin Department of Health and Family Service Reference Center, 1996a-2000a)

During the same 5-year time period, an average of just over 10 people per year were killed in motor vehicle accidents in Juneau County, a total of 52 deaths. Nearly half of the deaths in motor vehicle accidents in Juneau County from 1996-2000 were alcohol-related. (See graph below)





Source: (Wisconsin Department of Health and Family Service Reference Center, 1996a-2000a)

#### PREVIOUS ASSESSMENTS

The Mauston School District Application for 21<sup>st</sup> Century Learning Center, the Juneau County Family Preservation and Family Support Project, and the Juneau County Community Assessment stated that child abuse and domestic violence were prevalent in the local community and priority health issues. The 1993 Community Health Assessment of Rural Mauston, Wisconsin also identified safety belt non-use as a health issue. Other issues related to intentional and unintentional injuries and violence identified in the 1993 assessment were TV violence and the need for first aid and CPR training.

The Juneau County Domestic Violence Coalition was organized in 1999 in order to address these issues locally.

#### **Key Findings:**

- Falls, traffic accidents, and poisonings leading causes of injuries
- High number of suicides
- High percentage of adults who do not use safety belts
- High number of improperly installed child safety seats
- Low rate of motor vehicle accidents
- Increasing child abuse and neglect caseload for the county human services department
- High rate of domestic violence reports and domestic violence incidents involving children

# **Mental Health and Mental Health Disorders**

#### **DEFINITION**

**Mental health** is inextricably linked with physical health and is fundamental to good health and human functioning. Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity. Mental health is indispensable to personal well being, family and interpersonal relationships, and meaningful contribution to community and society.

Mental illness is the term that refers collectively to all diagnosable mental disorders. Mental disorders are health conditions that are characterized by alterations in thinking, mood, or behavior or some combination thereof, which are associated with distress and impaired functioning and result in human problems that may include disability, pain, or death.

From *Healthiest Wisconsin 2010 Part I: A Partnership Plan to Improve the Health of the Public* by the Wisconsin Turning Point Transformation Team, pg. 67

#### HEALTH INDICATOR DATA

Turning Point principles suggest that mental health and mental health disorders are linked to homicide and suicide.

Suicide, Homicide, Psychiatric Hospitalizations, Death Due to Mental Disorders, Child Abuse and Neglect, and Domestic Abuse are examined here as indicators of mental health and mental health disorders at the local level.

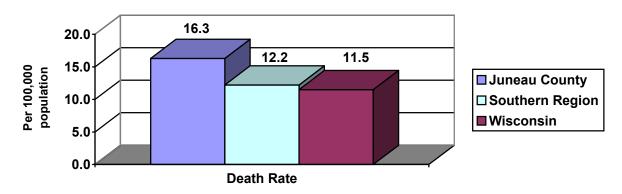
Suicide – The Juneau County Wisconsin Health Status Report shows that Juneau County compares unfavorably to the nation and to peer counties in terms of its death rate due to suicide. Juneau County's 1993-1997 rate was 18.8 per 100,000 population (age –adjusted to the year 2000), compared to peer counties ranging from 3.6-22.0 (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

Local level data show that there were 19 deaths by suicide in Juneau County from 1995 to 1999, a rate of 16.3 per 100,000<sup>11</sup>. This rate is higher than the southern region and state as shown in the following chart (Wisconsin Bureau of Information AIM, 1999b). Recent reports show that 6 suicides in 1999 and 2000 were associated with firearms (Firearm Injury Center, 2001) and (Firearm Injury Center, 2002).

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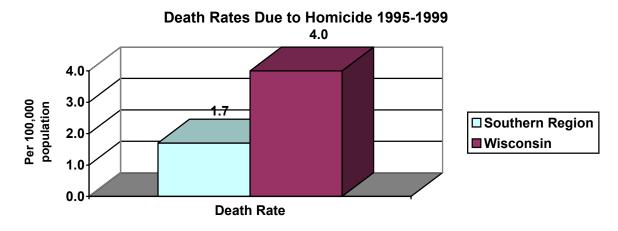
 $<sup>^{11}</sup>$  Rates based on fewer than 20 cases are not reliable according to the data source. The information is included here in order to compare county to regional and state rates.

Suicide Rates 1995-1999



Source: (Wisconsin Bureau of Information AIM, 1999b)

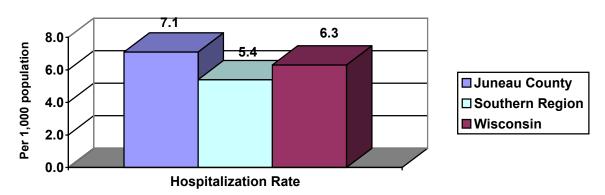
Homicide – There were fewer than five homicides in Juneau County from 1995-1999. The death rate due to homicide for the southern region (1.7 per 100,000) was lower than the state rate (4.0 per 100,000) as shown in the chart below(Wisconsin Bureau of Information AIM, 1999b).



Source: (Wisconsin Bureau of Information AIM, 1999b)

*Psychiatric Hospitalizations* – From 1996 to 2000, Juneau County had an average of 7.1 psychiatric hospitalizations (per 1,000 population) per year. For the same time period, the southern region's average psychiatric hospitalization rate was 5.4, and the state rate was 6.3 (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b).

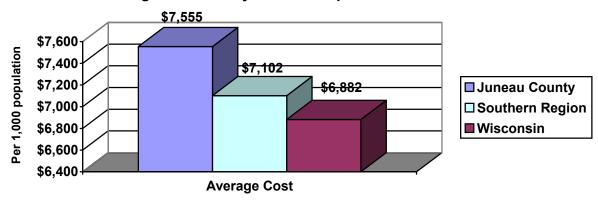
**Psychiatric Hospitalization Rates 1996-2000** 



Source: (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b)

The average cost of psychiatric hospitalizations for Juneau County (\$7,555) was higher than the southern region (\$7,102) or state (\$6,882) for 1996 to 2000 as shown in the following chart. Juneau County's cost per capita for psychiatric hospitalization was \$54, also higher than the region (\$38) or the state (\$43) (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b).

**Average Cost for Psychiatric Hospitalizations 1996-2000** 



Source: (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b)

The *Juneau County Department of Human Service 2000 Annual Report to the County Board* reported the number of involuntary (i.e., court ordered) hospitalizations increased from an historical average of approximately 100 per year to 160 in 2000. This was a 60% increase in cases for the Department, which is very significant, as these cases tend to be very time intensive for the department staff. The following table lists the hospitalizations and placements that the department funded in 2000 (Juneau County Department of Human Service, 2000).

# 2000 Mental Health Hospitalizations and Placements Funded by the Juneau County Human Services Department

	Mental Health	AODA
Inpatient	50	10
Detoxification		19
C.B.R.F.	13	8
<b>Adult Family Home</b>	7	0

Source: (Juneau County Department of Human Service, 2000)

Deaths Due to Mental Disorders – From 1995-1999, there were 34 actual deaths due to mental disorders, which is less than the number of expected deaths (38) but not significantly different (Juneau County 1995-1999 Death Files and Population Estimates, Wisconsin Bureau of Health Information AIM).

By comparing rates per 100,000 population, we see that Juneau County's death rate for mental disorders (29.1 per 100,000) was higher than the southern regional rate and state rate as shown in the following graph (Wisconsin Bureau of Information AIM, 1999b).

Mental Disorder Death Rates 1995-1999

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Source: (Wisconsin Bureau of Information AIM, 1999b)

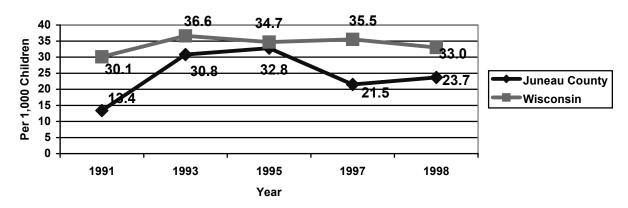
Child Abuse and Neglect – In 1999, there were 139 allegations of child maltreatment in Juneau County or 21.7 per 1,000 population. This compares to the state allegation rate of 28.9 per 1,000 population. Of maltreatment allegations, 15.1% were substantiated in Juneau County, compared to 29.7% for the state.

Of allegations in 1999, 42 were for physical abuse; 25 were for sexual abuse; 75 for neglect; and 5 were for emotional abuse(Wisconsin Department of Health and Family Services, 1999).

An historical comparison shows that the county rates of child abuse and neglect reports were lower than the state rates throughout the 1990s (Wisconsin Council on Children and

Families, 2000).

Child Abuse and Neglect Rates 1991-1998

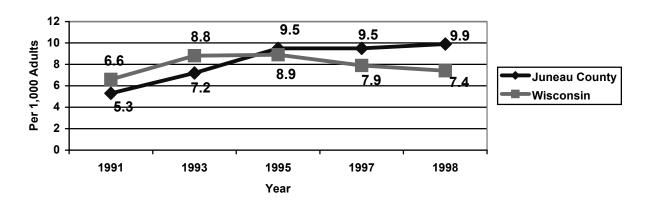


Source: (Wisconsin Council on Children and Families, 2000)

The Juneau County Department of Human Service 2000 Annual Report to the County Board reported that the number of child abuse and neglect cases for the department rose by 25% between 1998 and 2000 (Juneau County Department of Human Service, 2000).

*Domestic Abuse* – There were 174 reported cases of domestic violence in 1998. An historical comparison shows that the Juneau County rate of domestic violence incidents rose throughout the 1990s, exceeded the state rate in 1995 (Wisconsin Council on Children and Families, 2000).

**Domestic Violence Rates 1991-1998** 

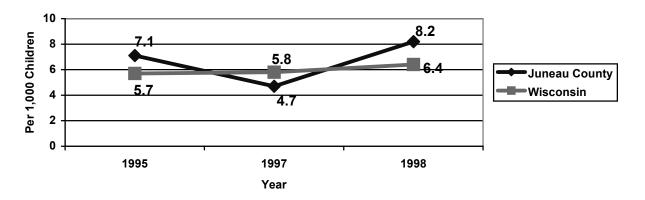


Source: (Wisconsin Council on Children and Families, 2000)

According to Wisconsin Department of Justice data, Juneau County had the 7<sup>th</sup> highest percentage of reported domestic abuse (per 1,000 people) for all Wisconsin counties for the combined years of 1998 and 1999 (Wisconsin Department of Justice, 1998) and (Wisconsin Department of Justice, 1999).

The rate of domestic violence incidents in which children were present was higher for the county than the state in 1995 and 1998 as shown chart below (Wisconsin Council on Children and Families, 2000).

#### **Domestic Violence Rates -- Where Children Are Present**



Source: (Wisconsin Council on Children and Families, 2000)

#### PREVIOUS ASSESSMENTS

The Mauston School District Application for 21<sup>st</sup> Century Learning Center, the Juneau County Family Preservation and Family Support Project, and the 1993 Community Health Assessment for Rural Mauston, Wisconsin stated that child abuse and domestic violence were prevalent in the local community and priority health issues.

#### **Key Findings:**

- High suicide rate
- High rate of psychiatric hospitalizations and high associated costs
- High mental disorder mortality rate
- Increasing child abuse and neglect caseload for the county human services department
- High rate of domestic violence reports and domestic violence incidents involving children

# **Overweight, Obesity, Lack of Physical Activity**

#### **DEFINITION**

People are considered **overweight or obese** based on their Body Mass Index (BMI). BMI is a mathematical formula that is a ratio of weight and height correlated with body fat (kg/m2). BMI is a better predictor of disease risk than body weight alone. Risk of mortality from many chronic conditions increase with a BMI over 25.0.

Definitions from the NIH National Health, Lung and Blood Institute (1998) show the following: a BMI between 18.5 and 24.9 is considered "normal weight;" overweight is having a BMI of 25.0 to 29.9. Three separate classes of obesity range from BMIs of 30.0 to 40.0.

Level of activity, like obesity, occurs along a continuum. As a guideline, the 1996 Surgeon General's Report on Physical Activity and Health recommends each person accumulate 30 minutes of moderately intensive physical activity for five or more days of the week, minimally 150 minutes a week of activity.

- From *Healthiest Wisconsin 2010 Part I: A Partnership Plan to Improve the Health of the Public* by the Wisconsin Turning Point Transformation Team, pg. 74

## TURNING POINT HEALTH INDICATOR DATA

Turning Point principles suggest that overweight, obesity, and lack of physical activity are linked to breast cancer, cerebrovascular disease (stroke), diabetes, heart disease, and suicide.

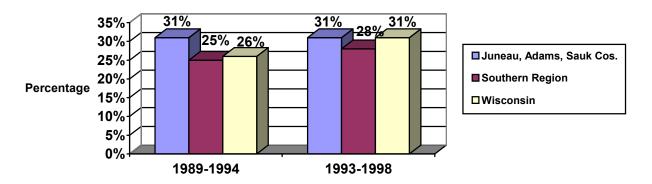
Overweight (Based on Body Mass), Diabetes, Heart Disease, Stroke, and Physical Inactivity are examined here as indicators at the local level.

Overweight (Based on Body Mass) – Thirty-one percent of Juneau, Adams, and Sauk County adults were overweight in 1993-1998 based on self-reported height and weight.<sup>12</sup> This is not significantly different from the state but higher than the southern region, which reported 28% for the same time period. (See graph below)

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 $<sup>^{12}</sup>$  Females with body mass index greater than or equal to 27.3 and males with body mass index greater than or equal to 27.8 were considered overweight.

#### Overweight Adults 18 and Older (Based on Body Mass)



Source: County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998, Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001

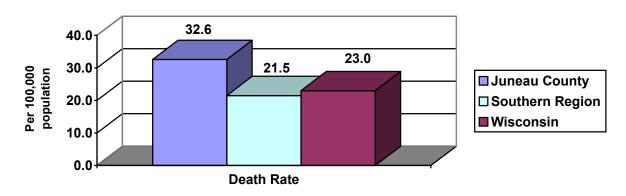
#### **Diabetes**

Morbidity – From 1993-1998, 5% of population over 18 in the three county area including Juneau County, Adams County, and Sauk County, had been told by a doctor that they had diabetes. This was not significantly different from the state of Wisconsin (5%) or the southern region (4%) (County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998, Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001).

But, there were significantly more hospitalizations due to diabetes (48) in 1998 than were expected (32) (Juneau County Number of Hospitalizations for Selected Chronic Conditions by Age, DHFS, Hospital Inpatient Database, Bureau of Health Information, 1998).

• Mortality – There were also 38 deaths due to diabetes from 1995-1999, which is significantly higher than the expected number (33). And, Juneau County's diabetes mortality rate (32.6) was higher than the southern region (21.5) or the state (23.0) for the 5-year period as shown in the following chart (Juneau County 1995-1999 Death Files and Population Estimates, Wisconsin Bureau of Health Information AIM).

#### **Diabetes Death Rates 1995-1999**

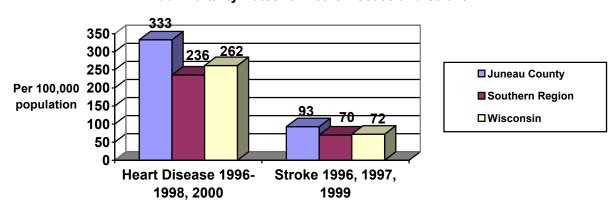


Source: (Wisconsin Bureau of Information AIM, 1999b)

Heart Disease – Juneau County's annual average death rate per 100,000 population for heart disease from 1996 to 2000 was 333, which was higher than the southern region (236) or the state (262). Heart disease accounted for 394 deaths from 1996 to 2000 in Juneau County or 29% of all deaths during the 5-year period. See next graph for comparison (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b).

Stroke – Juneau County's average annual death rate for stroke for 1996-1997 and 1999<sup>13</sup> was 93 per 100,000 population. By comparison, the southern region's death rate for stroke was 70 and the state's rate was 72 for the same 3-year time period (See following graph). There were 94 deaths attributable to stroke in Juneau County from 1996-2000 or 7.2% of all deaths for the 5-year period (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b).

#### **Annual Mortality Rates for Heart Disease and Stroke**



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<sup>&</sup>lt;sup>13</sup> The 1998 and 2000 Profiles for Juneau County does not list a death rate for cerebrovascular disease (stroke), so a 3-year average death rate from 1996-1997 and 1999 was calculated rather than a 5-year average.

Source: (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b)

## RELATED DATA

Physical Inactivity – Fifty-five percent of Juneau, Adams, and Sauk County adults surveyed reported being physically inactive in 1994, 1996, and 1998. Physical inactivity was defined as performing no leisure-time physical activity, performing one or more physical activities for less than 20 minutes, or fewer than 3 times per week. This compared with the southern region at 52% and Wisconsin at 53%. (See graph below)

**Physically Inactive Adults** 

#### 55% 55% 54% 54% 53<mark>%</mark> ■Juneau, Adams, Sauk Cos. 53% 53% ■ Southern Region 52<mark>%</mark> Percentage 52% □Wisconsin 51% 50% 1989-1992, 1994 1994, 1996, 1998

Source: County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998, Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001

#### PREVIOUS ASSESSMENTS

Lack of recreational activities for teens was identified as a priority in The Mauston School District Application for 21<sup>st</sup> Century Learning Center and the Juneau County Family Preservation and Family Support Project.

## **Key Findings:**

- Over 30% of adults are overweight
- High death rate due to diabetes
- Over 50% of adults are physically inactive
- High death rate due to heart disease
- High death rate due to stroke

## **Social and Economic Factors That Influence Health**

### DEFINITION

The direct relationship between the **socioeconomic position** of a population and its health is well established. Research studies have clearly documented that people who are socioeconomically better off do better on most measures of health status. These differences in morbidity and mortality between socioeconomic groups have been observed in many studies and constitute one of the most consistent epidemiological research findings.

- From *Healthiest Wisconsin 2010 Part I: A Partnership Plan to Improve the Health of the Public* by the Wisconsin Turning Point Transformation Team, pg. 76

## **HEALTH INDICATOR DATA**

Turning Point principles suggest social and economic factors are linked to AIDS/HIV infection, breast cancer, cerebrovascular disease (Stroke), diabetes, heart disease, homicide, infant mortality, lung cancer/COPD, motor vehicle crashes, pneumococcal infections, and suicide.

Infant Mortality, Suicide, Homicide, Low Birth Weight Babies, Births to Teens, Mental Health, Child Abuse and Neglect, Domestic Abuse, Self-Rated Health Status, and Chronic Illness are examined here as indicators of social and economic factors that influence health at the local level.

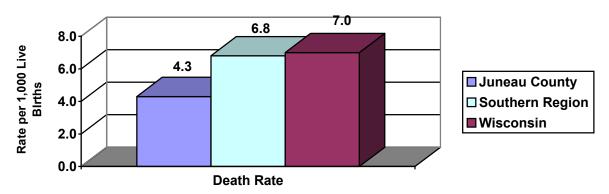
Infant Mortality – Juneau County compared favorably to peer counties in terms of its infant mortality rate (per 1,000 live births) from 1993-1997. Juneau County's 1993-1997 rate was 4.2 compared to peer counties, which ranged from 2.6 to 10.6 (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

Juneau County's infant mortality rate was 4.3 for the 5-year period 1995-1999. This is lower than the southern region or state. There were 6 actual infant deaths in the 5-year period<sup>14</sup> (Wisconsin Bureau of Information AIM, 1999a).

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<sup>&</sup>lt;sup>14</sup> Rates based on fewer than 20 cases are not reliable according to the data source. The information is included here in order to compare county to regional and state rates.

**Infant Mortality Rates 1995-1999** 

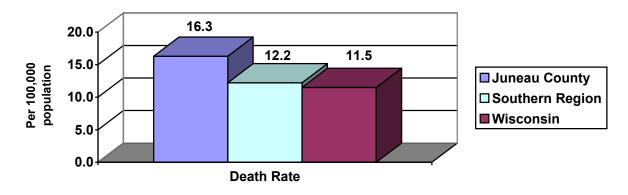


Source: (Wisconsin Bureau of Information AIM, 1999a)

Suicide – The Juneau County Wisconsin Health Status Report shows that Juneau County compares unfavorably to the nation and to peer counties in terms of its death rate due to suicide. Juneau County's 1993-1997 rate was 18.8 per 100,000 population (age –adjusted to the year 2000), compared to peer counties ranging from 3.6-22.0 (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

Local level data show that there were 19 deaths by suicide in Juneau County from 1995 to 1999, a rate of 16.3 per 100,000.<sup>15</sup> This rate is higher than the southern region and state as shown in the following chart (Wisconsin Bureau of Information AIM, 1999b). Recent reports show that 6 suicides in 1999 and 2000 were associated with firearms (Firearm Injury Center, 2001) and (Firearm Injury Center, 2002).

Suicide Rates 1995-1999

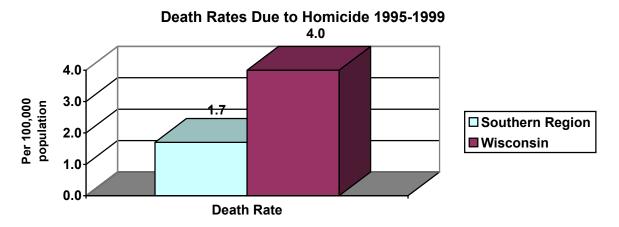


Source: (Wisconsin Bureau of Information AIM, 1999b)

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<sup>&</sup>lt;sup>15</sup> Rates based on fewer than 20 cases are not reliable according to the data source. The information is included here in order to compare county to regional and state rates.

Homicide – There were fewer than five homicides in Juneau County from 1995-1999. The death rate due to homicide for the southern region (1.7 per 100,000) was lower than the state rate (4.0 per 100,000) as shown in the chart below(Wisconsin Bureau of Information AIM, 1999b).



Source: (Wisconsin Bureau of Information AIM, 1999b)

Low Birth Weight Babies – Local birth files show that from 1995-1999, 8.5% of all births in Juneau County resulted in low birth weight babies (less than 2500 grams). Six percent of births in the southern region and 6.4% for the state resulted in low birth weight babies for the same 5-year time period (Birth Files and Population Estimates AIM, 1995-1999).

Juneau County also compared unfavorably to peer counties in the US in terms of the rate of low birth weight (under 2500 grams at birth) and very low birth weight babies (under 1500 grams at birth) from 1993-1997. There were 5.8 low birth weight babies (per 100,000 population) in Juneau County compared to 4.1 to 7.3 for peer counties from 1993-1997. And, there were 1.3 very low birth weight babies (per 100,000 population) in Juneau County compared to 0.3 to 1.4 for peer counties (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

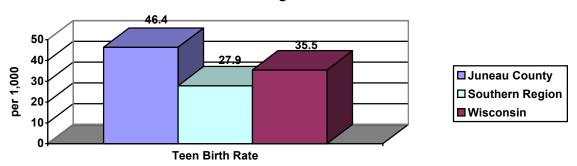
Births to Teens – Approximately 14% of all births in Juneau County from 1995-1999 were to teen-aged women (under 20), compared to 10.6% for the state of Wisconsin (Prenatal Care, Low Birth Weight and Teen Births, 1995-1999 Birth Files and Population Estimates (AIM).

Juneau County's 5-year average teen birth rate from 1996-2000 was 46.4, which is higher than the southern region (27.9) and the state (35.5)<sup>16</sup> (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b).

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<sup>&</sup>lt;sup>16</sup> Teen birth rate is defined as the number of births to teens aged 15-19 in a given year divided by the female population aged 15-19 (reported per 1,000).

Teen Birth Rates - Average from 1996 to 2000



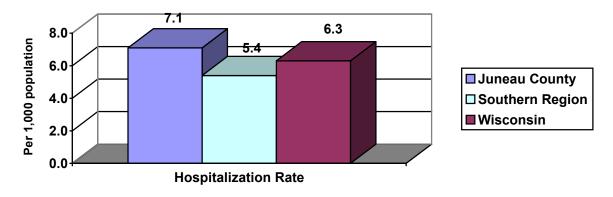
Source: (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b)

Juneau County's 1999 teen birth rate was very high in relation to other Wisconsin counties. Juneau County's one-year birth rate for women under 20 was 47.7; only 6 other counties in the state had higher birth rates in this age category. Only 2 other counties had birth rates that were higher than Juneau County's for women ages 18-19. Juneau's rate for this age group was 90.2 (Bureau of Health Information, 2001a).

#### Mental Health

Morbidity – From 1996 to 2000, Juneau County had an average of 7.1 psychiatric hospitalizations (per 1,000 population) per year. For the same time period, the southern region's average psychiatric hospitalization rate was 5.4, and the state rate was 6.3 as shown below (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b).

**Psychiatric Hospitalization Rates 1996-2000** 

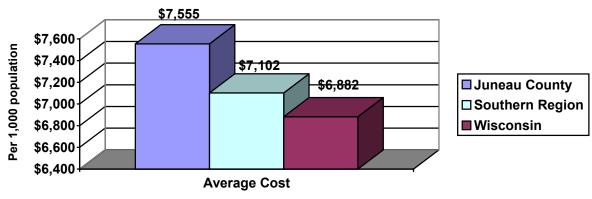


Source: (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b)

The average cost of psychiatric hospitalizations for Juneau County (\$7,555) was higher than the southern region (\$7,102) or state (\$6,882) for 1996 to 2000 as shown in the following chart. Juneau County's cost per capita for psychiatric hospitalization was \$54, also higher than the region (\$38) or the state (\$43)

(Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b)

Average Cost for Psychiatric Hospitalizations 1996-2000



urce: (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b)

The *Juneau County Department of Human Service 2000 Annual Report to the County Board* reported the number of involuntary (i.e., court ordered) hospitalizations increased from an historical average of approximately 100 per year to 160 in 2000. This was a 60% increase in cases for the Department, which is very significant, as these cases tend to be very time intensive for the department staff. The following table lists the hospitalizations and placements that the department funded in 2000 (Juneau County Department of Human Service, 2000).

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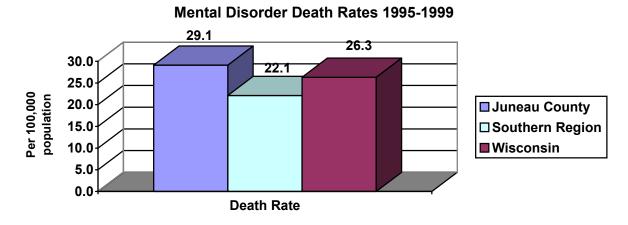
# 2000 Mental Health Hospitalizations and Placements Funded by the Juneau County Human Services Department

	<b>Mental Health</b>	AODA
Inpatient	50	10
Detoxification		19
C.B.R.F.	13	8
Adult Family Home	7	0

Source: (Juneau County Department of Human Service, 2000)

 Mortality – From 1995-1999, there were 34 actual deaths due to mental disorders, which is less than the number of expected deaths (38) but not significantly different (Juneau County 1995-1999 Death Files and Population Estimates, Wisconsin Bureau of Health Information AIM).

By comparing rates per 100,000 population, we see that Juneau County's death rate for mental disorders (29.1 per 100,000) was higher than the southern regional rate and state's rate as shown in the following graph (Wisconsin Bureau of Information AIM, 1999b).

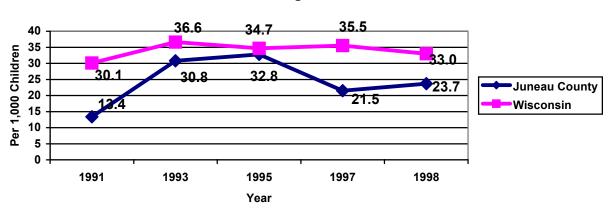


Source: (Wisconsin Bureau of Information AIM, 1999b)

Child Abuse and Neglect – In 1999, there were 139 allegations of child maltreatment in Juneau County or 21.7 per 1,000 population. This compares to the state allegation rate of 28.9 per 1,000 population. Of maltreatment allegations, 15.1% were substantiated in Juneau County, compared to 29.7% for the state.

Of allegations in 1999, 42 were for physical abuse; 25 were for sexual abuse; 75 for neglect; and 5 were for emotional abuse(Wisconsin Department of Health and Family Services, 1999).

An historical comparison shows that the county rates of child abuse and neglect reports were lower than the state rates throughout the 1990s (Wisconsin Council on Children and Families, 2000).



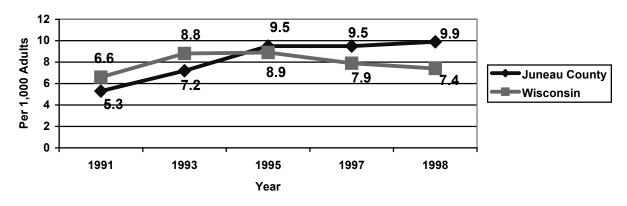
#### Child Abuse and Neglect Rates 1991-1998

Source: (Wisconsin Council on Children and Families, 2000)

The *Juneau County Department of Human Service 2000 Annual Report to the County Board* reported that the number of child abuse and neglect cases for the department rose by 25% between 1998 and 2000 (Juneau County Department of Human Service, 2000).

*Domestic Abuse* – There were 174 reported cases of domestic violence in 1998. An historical comparison shows that the Juneau County rate of domestic violence incidents rose throughout the 1990s, exceeded the state rate in 1995 (Wisconsin Council on Children and Families, 2000).

## **Domestic Violence Rates 1991-1998**

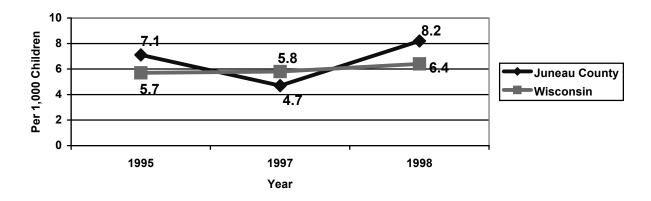


Source: (Wisconsin Council on Children and Families, 2000)

According to Wisconsin Department of Justice data, Juneau County had the 7<sup>th</sup> highest percentage of reported domestic abuse (per 1,000 people) for all Wisconsin counties for the combined years of 1998 and 1999 (Wisconsin Department of Justice, 1998) and (Wisconsin Department of Justice, 1999).

The rate of domestic violence incidents in which children were present was higher for the county than the state in 1995 and 1998 as shown chart below (Wisconsin Council on Children and Families, 2000).

**Domestic Violence Rates -- Where Children Are Present** 



Source: (Wisconsin Council on Children and Families, 2000)

Self-Rated Health Status – The combined Family Health Survey (1994-1998) found that 14% of Juneau County residents felt their health status to be fair or poor. This percentage is higher than the southern region or state as shown in the table below.

Perceived Health Status 1994-1998				
	Juneau County	Southern Region	WI	
Percent who perceive health status to be fair or poor	14%	8%	9%	

Source: Juneau County Percent Persons with Fair or Poor Health, Wisconsin Department of Health and Family Services Reference Center

Chronic Illness – The Family Health Survey (1994-1998) also reported the percent of persons with selected illnesses: cancer, diabetes, hypertension, coronary heart disease, heart attack, stroke, asthma, emphysema or chronic bronchitis, and arthritis. Juneau County had a higher percentage of residents less than 65 years of age who reported having at least one of the selected chronic illnesses than the southern region or the state. These results are shown in the table below.

Chronic Illness 1994-1998			
	Juneau County	Southern Region	WI
Percent under 65 years with at least one of 9 selected chronic illnesses	29%	22%	23%

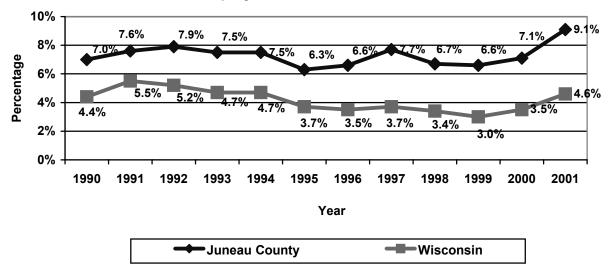
Source: Juneau County Percent of Persons Reported to Have Selected Chronic Conditions, by Age Groups, Wisconsin Department of Health and Family Services Reference Center

## RELATED DATA

Unemployment, Labor Force Participation Rate, Income, Poverty, Education, Elderly, and Single Parent Households are also of social and economic issues that affect health.

*Unemployment* – Juneau County's unemployment rate has been consistently higher than that of the state since 1990 as shown in the following graph. A recent news release from the Wisconsin Department of Workforce Development showed that Juneau County had the highest monthly unemployment rate of all Wisconsin counties at 13.4% in February 2002 (Department of Workforce Development, 2002). This is a direct result of the recent loss of 600 jobs in the county. (Four of the county's biggest businesses closed, moved, or relocated in 2001.) The unemployment rate is predicted to decrease to approximately 11% in the near future, which is still extremely high in comparison to other counties in the state (Anonymous2002).

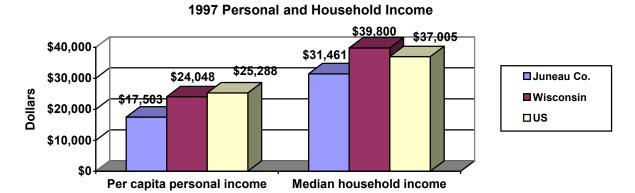
## **Unemployment Rates 1990 - 2001**



Source: LAUS Files, 2000, Bureau of Workforce Information, Department of Workforce Development and (Bureau of Workforce Information, 2001)

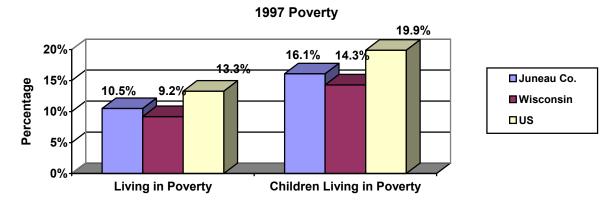
Labor Force Participation Rate – Juneau County's 1998 labor force participation (60.3%) was the fifth lowest county rate in Wisconsin and was substantially lower than the state rate (74.4%). This means that, compared to most Wisconsin counties, Juneau County has fewer people who are 16 and older and are either working or looking for work. People may choose not to work for several reasons including retirement or inability to perform work. In Juneau County, it is likely that some people are not working and not looking for work because wages are depressed locally, and the local manufacturing industry has made recent cutbacks. The seasonal nature of service jobs is also a factor as is the decreasing number of working age adults between 25 and 39 (Juneau County Workforce Profile, Wisconsin Department of Workforce Development, Bureau of Labor Market Information and Customer Services).

*Income* – Juneau County's 1997 annual per capita personal income and median household income fell well behind the state and nation as shown in the following graph.



Sources: Bearfacts for Juneau County, Regional Economic Information System, Bureau of Economic Analysis and US Census, State and County QuickFacts, 2000

*Poverty* – Juneau County also had a higher percentage of people living in poverty than the state in 1997 as well as a higher percentage of children living in poverty.

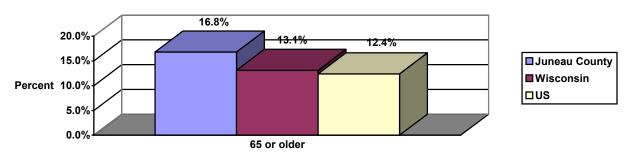


Source: US Census, State and County QuickFacts, 2000

Education – The percentage of people aged 25 years and over with a high school diploma or higher in Juneau County was 78.5% in 2000. This is lower than the state (85.1%). The percentage of people aged 25 years and older with a bachelor's degree or higher in Juneau County (10.0%) compared to 22.4% for the state (US Census, 2000b).

Elderly Population – According to the 2000 Census, Juneau County had a higher percentage of the population over the age of 65 than the state or nation as shown in the graph below. This percentage is expected to rise for the county in the next decade.

#### Population 65 and Older



Source: US Census, American FactFinder, 2000

Juneau County's high median age (39.4) is another indication that the population is aging. The median age for the state is 36.0 and for the nation is 35.3 (US Census, American FactFinder, 2000).

Single Parent Families – In 2000, 5.6% of Juneau County's 9,696 households contained a single female parent with children. This percentage is lower than the state (6.2%) or the nation (7.2%) (US Census 2000, Table DP-1, Profile of General Demographic Characteristics: 2000).

## PREVIOUS ASSESSMENTS AND PLANS MADE

Poverty and a lack of well-paying employment options were identified in three assessments. The "Central Wisconsin Community Action Council (CAC) Needs Assessment Survey" had the strongest focus on this issue. This study showed that poverty and lack of jobs in the area were major factors contributing to CAC clients' needs for assistance. The "Juneau County Family Preservation and Family Support Project" identified poverty, unemployment, and poor wages as underlying economic indicators that contribute to the severity of other local health needs. And, the "Mauston School District Application for 21st Century Learning Center" showed that Juneau County had a high level of poverty, low average household incomes, and high unemployment in comparison to the state.

Two assessments noted that the services for aging population in the area were important. The "Mauston School District Application for 21<sup>st</sup> Century Learning Center" showed that many local senior citizens utilized local services such as a meal program and food pantry. This assessment proposed incorporating programming for seniors as part of the Community Learning Center activities. The "Building Program for the Mauston Public Library" document concludes that with an aging population, it is important to gear library resources to the elderly.

Three assessments identified family and parenting issues as high priority areas. The Mauston School District Application for 21<sup>st</sup> Century Learning Center, the Juneau County Family Preservation and Family Support Project, and the 1993 Community Health Assessment in Rural Mauston, Wisconsin stated that child abuse and domestic violence

were prevalent in the local community and priority health issues. The Mauston School District Application for 21<sup>st</sup> Century Learning Center and the Juneau County Family Preservation and Family Support Project indicated that the breakdown of families and lack of parenting skills affected children's well-being negatively.

Teen pregnancy was identified as a priority health issue in two assessments: the Juneau County Family Preservation and Family Support Project and the Mauston School District Application for 21<sup>st</sup> Century Learning.

*Plans* – After a thorough assessment process, the Juneau County Family Preservation and Family Support Project developed a home visitation program to serve families referred to FPS. The four primary goals were: 1) to initiate a home visitation program; 2) target pregnant and parenting teens; reduce the incidence of repeat teen pregnancies within a two-year timeframe; and 4) utilize the "family unity" model during home visits.

## **EVALUATION OF PROGRESS**

The home visitation program was established in February 1999 and served 102 families (of 128 referred). Forty-three percent of families referred (56) were teen parent families, and 3 teens (2%) in the program experienced second pregnancies within 2 years. Through the program, 1122 home visits were made in the 2-year period at an average of 9 visits per family. Seventy-five percent of cases referred were considered to have positive outcomes (Juneau County Family Preservation and Support Cumulative Report Summary and Data, January 15, 2002).

## **Key Findings:**

- High suicide rate
- High percentage and rate of low birth weight babies
- High teen birth rate
- High rate of psychiatric hospitalizations and associated costs
- High mental disorder mortality rate
- Increasing child abuse and neglect caseload for the county human services department
- High rate of domestic violence reports and domestic violence incidents involving children
- Low annual per capita personal income and median income
- High percentage of people living in poverty
- High percentage of people aged 65 and older compared to state and US
- High percentage of adults under 65 with selected chronic illnesses

## **Tobacco Use and Exposure**

### DEFINITION

**Tobacco use and exposure** is the active or passive introduction into the human body of toxins found in tobacco products. Tobacco use and exposure is a complex web of social influences, physiological addiction, and marketing and promotion of tobacco products. Effective tobacco prevention and control efforts reduce youth initiation, promote cessation, eliminate environmental tobacco smoke, and address the disparate impact of tobacco on various populations. Comprehensive efforts include counter-marketing, community interventions, legislation and policy change, and evaluation and monitoring.

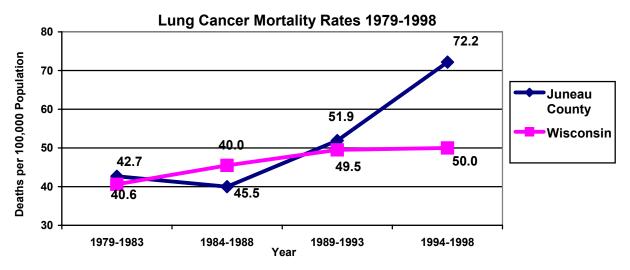
- From Healthiest Wisconsin 2010 Part I: A Partnership Plan to Improve the Health of the Public by the Wisconsin Turning Point Transformation Team, pg. 78

## **HEALTH INDICATOR DATA**

Turning Point principles suggest that tobacco use and exposure is linked to cerebrovascular disease (stroke), heart disease, infant mortality, lung cancer/COPD, and pneumococcal infections.

Lung Cancer Mortality, Deaths Due To Lung, Trachea, and Bronchus, Congestive Heart Failure, Heart Disease, Stroke, Emphysema and Chronic Lung Disease, Asthma, Years of Potential Life Lost, Low Birth Weight and Fetal Death are examined here as indicators of tobacco use and exposure at the local level.

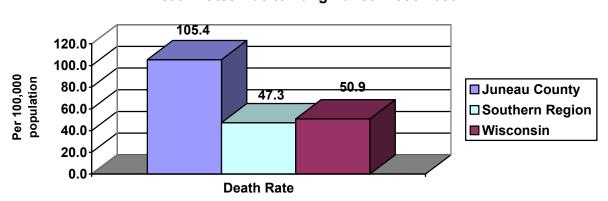
Lung Cancer Mortality – The lung cancer mortality rate in Juneau County increased by 69% from the early 1980s to the late 1990s. This represents a change from 42.7 deaths due to lung cancer (per 100,000 population) in the combined years of 1979-1983 to 72.2 deaths during 1994-1998. This compares to an increase of 23% for the state of Wisconsin as shown in the graph below. Only one Wisconsin county (Menominee County) had a higher lung cancer mortality rate than Juneau County from 1994-1998. Rates are age-adjusted to the US 2000 Standard Population (Trends in Wisconsin: A State and County Assessment of Tobacco Use, University of Wisconsin Comprehensive Cancer Center Report to the Wisconsin Tobacco Control Board 2001).



Source: Tobacco Trends in Wisconsin: A State and County Assessment of Tobacco Use, University of Wisconsin Comprehensive Cancer Center Report to the Wisconsin Tobacco Control Board 2001

Juneau County's death rate due to lung cancer from 1993-1997 was 64.6 per 100,000 population. This compared unfavorably with Juneau's peer counties, which ranged from 33.5 to 64.6. Rates are age-adjusted to the year 2000 standard (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

A closer look reveals that Juneau County's average yearly death rate due to lung cancer (105.4 per 100,000 population) was over twice that of the southern region (47.3) or Wisconsin (50.9) from 1995-1999. (Rates are not age-adjusted) (Wisconsin Bureau of Information AIM, 1999b)



**Death Rates Due to Lung Cancer 1995-1999** 

Source: (Wisconsin Bureau of Information AIM, 1999b)

Comparing actual deaths to expected deaths due to lung cancer, there were 123 deaths from 1995-1999. This is significantly higher than the expected number (75) of cases

(Juneau County 1995-1999 Death Files and Population Estimates, Wisconsin Bureau of Health Information AIM).

Lung, Trachea, and Bronchus – From 1993-1997, there was an annual average of 19 deaths attributed to lung, trachea, and bronchus disease. In 1998, the number of actual deaths from lung, trachea, and bronchus disease (26) was significantly higher than the expected number of deaths (16) (Juneau County Actual and Expected Mortality for Selected Chronic Conditions, 1998 Resident Death Certificates, Wisconsin Bureau of Health Information).

Congestive Heart Failure – From 1993-1998, there was an annual average of 5 deaths due to congestive heart failure, including 5 in 1998. The expected number of deaths in 1998 was 8, which is not significantly different that the actual number (Juneau County Actual and Expected Mortality for Selected Chronic Conditions, 1998 Resident Death Certificates, Wisconsin Bureau of Health Information).

Emphysema and Chronic Lung Disease – There was not a significant difference between the number of actual deaths due to emphysema and chronic lung disease (12) and the expected number (13) in 1998. From 1993-1997, there was an annual average of 14 deaths per year attributable to emphysema and chronic lung disease (Juneau County Actual and Expected Mortality for Selected Chronic Conditions, 1998 Resident Death Certificates, Wisconsin Bureau of Health Information).

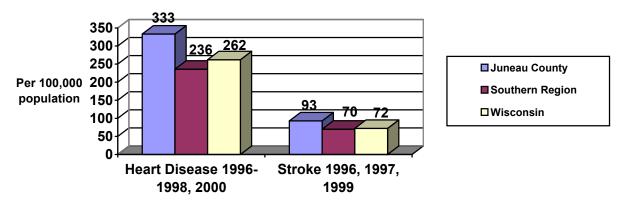
Heart Disease – Juneau County's annual average death rate per 100,000 population for heart disease from 1996 to 2000 was 333, which was higher than the region (236) or the state (262). Heart disease accounted for 394 deaths from 1996 to 2000 in Juneau County or 29% of all deaths during the 5-year period. (Rates are not age-adjusted) See next graph for comparison (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b).

Stroke – Juneau County's average annual death rate for stroke for 1996-1997 and 1999<sup>17</sup> was 93 per 100,000 population. By comparison, the southern region's death rate for stroke was 70 and the state's rate was 72 for the same 3-year time period (See following graph). There were 94 deaths attributable to stroke in Juneau County from 1996-2000 or 7.2% of all deaths for the 5-year period (Rates are not age-adjusted) (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b).

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<sup>&</sup>lt;sup>17</sup> The 1998 and 2000 Profiles for Juneau County does not list a death rate for cerebrovascular disease (stroke), so a 3-year average death rate from 1996-1997 and 1999 was calculated rather than a 5-year average.

## **Annual Mortality Rates for Heart Disease and Stroke**



Source: (Wisconsin Department of Health and Family Service Reference Center, 1996b-2000b)

Asthma – Seven percent of the population under the age of 65 were reported to have asthma for the combined years of 1994-1998. This is the same as the region and state (Juneau County Percent Persons Reported to Have Selected Chronic Conditions, by Age Groups, Wisconsin Department of Health and Family Services – Reference Center).

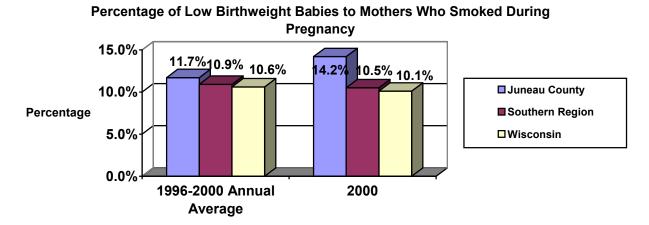
Years of Potential Life Lost – A recent report estimated years of potential life lost for people who died prematurely from smoking-related cancers from 1996-2000. In Juneau County there was an annual average of 360 years of potential life lost to smoking-related cancer deaths (Wisconsin Department of Health and Family Services, 2002).

Low Birth Weight Babies – Local birth files show that from 1995-1999, 8.5% of all births in Juneau County resulted in low birth weight babies (less than 2500 grams). Six percent of births in the southern region and 6.4% for the state resulted in low birth weight babies for the same 5-year time period (Birth Files and Population Estimates AIM, 1995-1999).

Juneau County also compared unfavorably to peer counties in the US in terms of the rate of low birth weight (under 2500 grams at birth) and very low birth weight babies (under 1500 grams at birth) from 1993-1997. There were 5.8 low birth weight babies (per 100,000 population) in Juneau County compared to 4.1 to 7.3 for peer counties from 1993-1997. And, there were 1.3 very low birth weight babies (per 100,000 population) in Juneau County compared to 0.3 to 1.4 for peer counties (Juneau County Wisconsin Community Health Status Report, US Department of Health and Human Services, Health Resources and Services Administration, 2000).

Low Birth Weight Babies and Maternal Smoking – An average of 11.7% of births to mothers who smoked during pregnancy resulted in low birth weight babies in Juneau County from 1996-2000. This is slightly higher than the region (10.9%) or the state (10.6). In the year 2000, however, Juneau County's percentage of low birth weight babies to smoking mothers was markedly higher than the region or state (see graph below).

Over 14% of smoking mothers had low birth weight babies in 2000, compared to 3% of non-smoking mothers in Juneau County (Wisconsin Department of Health and Family Service Reference Center, 2000).



Source: (Wisconsin Department of Health and Family Service Reference Center, 2000).

Fetal mortality – There were 10 fetal deaths<sup>18</sup> in Juneau County from 1995-1999, a rate of 7.1 per 1,000 live births.<sup>19</sup> This rate is higher than the southern region (5.5) and the state (5.7) (Wisconsin Bureau of Information AIM, 1999a).

## RELATED DATA

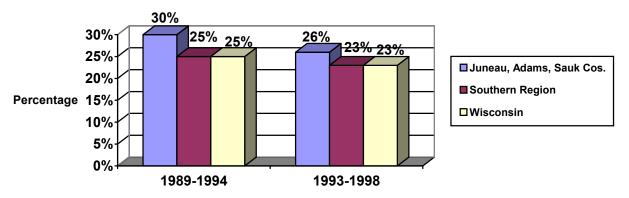
Percent of Cigarette Smokers and Percentage of Women Who Smoked During Pregnancy, Tobacco Use Among Youth Economic Impact of Cigarette Smoking, and Clean Indoor Air activities are important indicators of tobacco use.

Current Cigarette Smokers – Twenty-six percent of Juneau, Adams, and Sauk County adults smoked during the combined years of 1993-1998, which is higher than the southern region (23%) or the state (23%) for the same time period. See chart below for comparison.

<sup>19</sup> Rates based on fewer than 20 cases are not reliable according to the data source. The information is included here in order to compare county to regional and state rates.

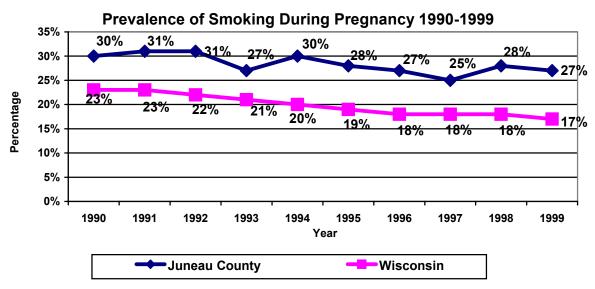
<sup>&</sup>lt;sup>18</sup> Fetal deaths are defined as reported deaths of fetuses over 20 weeks gestational age.

## **Current Cigarette Smokers (Adults 18 and Older)**



Source: County and Regional Prevalence Estimates of Behavioral Risk Factors and Health Screening Practices Wisconsin, Combined Years 1989-1994 and 1993-1998, Wisconsin Bureau of Health Information, DHCF/DHFS, May 2001

Women Who Smoked During Pregnancy – The percentage of women who smoked during pregnancy dropped by 3% from 1990 to 1999 as shown in the following table. The prevalence of women who smoked during pregnancy, however, remained higher than the state throughout the 1990s. And, Juneau County was among the counties in Wisconsin with the highest percentage of smoking pregnant women for the combined years of 1997 and 1998 (26.5%).



Source: Tobacco Trends in Wisconsin: A State and County Assessment of Tobacco Use, University of Wisconsin Comprehensive Cancer Center Report to the Wisconsin Tobacco Control Board 2001

*Tobacco Use Among Youth* – A recent survey of school-aged children in Necedah (6<sup>th</sup>-12<sup>th</sup> grade) reported that 28% had smoked cigarettes once or more in the last 30 days. The percentage was higher for older youths. Among 11<sup>th</sup> and 12<sup>th</sup> graders, 40% had smoked cigarettes in the last 30 days (Search Institute, 2000).

The same survey reported that 11% of school-aged children had used smokeless tobacco within the previous 12 months. Like cigarette use, use of smokeless tobacco was higher for older youths. Among high school seniors (12<sup>th</sup> grade), 24% had used smokeless tobacco within the last year (Search Institute, 2000).

Tobacco use among youth was also identified in two earlier assessments. These assessments were the *Search Institute Profiles of Student Life: Attitudes and Behaviors (1992)* that surveyed school-aged children in four Juneau County School Districts and the *Youth Risk Behavior Survey (1994)* that surveyed children in the Mauston Public Schools (Search Institute, 1992) and (Mauston Community Health Improvement Project (MCHIP), 1994).

*Economic Impact of Cigarette Smoking* — There was an estimated \$7,160,000 in health care costs in 1998 as a result of cigarette smoking in Juneau County. And, an estimated \$6,350,000 was lost in worker productivity from premature death due to cigarette smoking (Wisconsin Department of Health and Family Services, 2002).

Clean Indoor Air — Juneau County has a smoke-free building and county-owned vehicle policy, as well as smoke-free zones within 25 feet of all handicapped-accessible entrances to county-owned buildings.

In 2001, only 33% of cities in Juneau County banned smoking in all buildings, compared to 70% of all Wisconsin cities. Although 14 dining establishments have voluntarily adopted smoke-free policies in Juneau County, no Juneau County municipalities have taken the step to institute smoke-free dining ordinances. (There are only 11 municipalities with smoke-free dining ordinances in Wisconsin.) Approximately 60% of 60 respondents surveyed in Juneau County in 2001 indicated that they had smoke-free policies at their worksite. An additional 27% of workplaces restricted smoking to certain areas (data reported from the Juneau County Tobacco Control Specialist).

#### PREVIOUS ASSESSMENTS AND PLANS MADE

Although tobacco use and exposure were not mentioned in the most recent assessments, its effects, including cancer, heart disease, and asthma were identified in the 1993 Juneau County health assessment.

## **Key Findings:**

- High lung cancer mortality rate
- High death rate due to lung, trachea, and bronchus
- · High death rate due to heart disease
- High death rate due to stroke
- High percentage of women who smoked during pregnancy
- High percentage of cigarette smokers
- High percentage of tobacco use among local youth

## **Part V: Community Prioritization Process**

On October 3, 2001, the Juneau County Health Department hosted a community meeting at the Mauston Park Oasis from 7:30-9:30 am. Barbara Theis, Health Officer for Juneau County, facilitated the meeting. The purpose of the meeting was to inform community members about local health issues and to solicit community members' input regarding local health priorities. Fifty-four community representatives attended the meeting.

Ms. Theis began the meeting with an overview of Juneau County's health indicators, demographic data and economic data. The presentation was organized based on the Wisconsin Turning Point Initiative's eleven priorities and the information found in *Parts II-IV* of this document. The eleven Turning Point priorities are:

- 1. Access to primary care and preventative health services
- 2. Adequate and appropriate nutrition
- 3. Alcohol and other substance use and addiction
- 4. Environmental and occupational health hazards
- 5. Existing, emerging, and re-emerging communicable diseases
- 6. High-risk sexual behavior
- 7. Intentional and unintentional injuries and violence
- 8. Mental health and mental disorders
- 9. Overweight, obesity, and lack of physical activity
- 10. Social and economic factors that influence health
- 11. Tobacco use and exposure

Kathy Metzenbauer, UW Cooperative Extension Family Living Agent, then asked participants to assist in identifying three issues that county officials would focus on during the next five years, based on the information presented by Ms. Theis. In order to do this, they were provided with a list of the eleven Wisconsin Turning Point priorities. Each participant was also provided with three sticky dots. They were asked to place their dots on the Turning Point Priorities that they felt were the most important/pertinent issues. Participants were able to place their dots in any combination that they preferred, for example, they could place one dot each on three separate issues, they could place two dots on one issue and one dot on a second issue, or they could place all three dots on a single issue.

The group chose the following three priorities:

- Access to primary care and preventative health services
- Social and economic factors that influence health
- Tobacco use and exposure

The group spent about five minutes discussing local resources and problems related to each topic.

<u>Access to primary care and preventative health services</u>. Participants noted that there are several free and low-cost health services provided through local clinics in Juneau County. For example, one clinic has recently hired four new physicians and provides free and low cost services to low-income families as well as Medicaid and Badger Care recipients. The community may not be aware of all of the resources, however, so more pubic awareness may be necessary.

Participants also discussed the need for education at the high school level regarding health issues and employment/economic options for students after graduation. Currently, at least two local high schools assist students with apprenticeships and alternative job training options. There is no formal curriculum regarding health issues, although many teachers integrate health into their classes.

Social and economic factors that influence health. The Economic Development Corporation, Juneau County Workforce Partnership and a local committee to expand daycare options were listed as positive economic resources for the county. Workforce issues were central to most of the discussion. Participants felt that the local workforce was not well trained and did not exhibit positive work ethics. The high rate of absenteeism was given as an example. Additionally, participants felt the "best and brightest" of local youth tended to leave Juneau County to pursue higher education and rarely returned because of limited employment opportunities. Finally, participants noted that employers needed to be aware of quality of life issues so that more people, including trained workers and professionals, would be drawn back to the county.

<u>Tobacco use and exposure</u>. The Tobacco Coalition, coordination between the Tobacco Coalition and local law enforcement, Red Ribbon Week, smoking cessation programs at the hospital and Sue Ann Thompson's pilot program called First Breath were listed as community resources related to tobacco use. The group agreed that tobacco use was a major cause for high heart disease and stroke rates and that tobacco was a highly addictive drug. Local smoking cessation efforts did not always show huge results but could affect small numbers of people to change their behavior gradually. For example, the First Breath program, in which Prenatal Care Coordinators and WIC staff are trained to provide smoking cessation counseling to clients, has helped many Juneau County women reduce their smoking but fewer actually quit smoking. The challenge of smoking among pregnant women was also briefly discussed.

## **Part VI: Summary**

Juneau County experienced tremendous population growth in the 1990s, characterized by the influx of retirees to the area. The county grew by over 12% between 1990 and 2000. Wisconsin grew by only 10% for the same decade. The county's population is aging (nearly 17% are 65 or older), and the health needs of the elderly will continue to be significant to Juneau County in the future.

Juneau County faces some challenging local economic conditions. The county has experienced a shrinking manufacturing base, which has eroded the number of well-paying jobs in the area. Unemployment rates in the county were high throughout the 1990s, ranging from 6.3%-7.7%. Juneau County reached a high of 13.4% unemployment in February 2002, the direct result of losing approximately 600 jobs in 2001. At the same time, Wisconsin and the nation experienced some of the lowest unemployment rates in recent history. Wisconsin unemployment rates ranged from 3.0-5.5% in the 1990s. Additionally, Juneau County had the fifth lowest labor force participation rate in the state in 1998. Juneau County incomes also tend to be lower than the state or nation. And, poverty levels were higher than the state, both overall poverty and poverty among children.

Previous assessments in the county identified both the aging population and the poverty and lack of well-paying jobs as health issues in Juneau. Other common themes in the most recent assessments were the lack of recreational activities for teens, teen pregnancy, transportation, and family and parenting skills.

On October 3, 2002, 54 community representatives attended a meeting to learn more about Juneau County health issues and to help select three health priorities to direct the work of the county health department. The three priority areas chosen were: 1) Access to primary care and preventative health services 2) Social and economic factors that influence health and 3) Tobacco use and exposure. Poverty and well-paying jobs, which were identified as significant health issues in previous assessments, are also directly linked to access to care and social and economic issues.

Several health issues emerged through the secondary data analysis.

• **Lung cancer** was one of the most striking health concerns for Juneau County. The lung cancer mortality rate in Juneau County increased by 69% from the early 1980s to the late 1990s, compared to a 23% increase for the state. Only one other county had a higher lung cancer mortality rate than Juneau from 1994-1998 (72.2 per 100, for 1994-1998). A more recent measure (1995-1999) shows that Juneau County's lung cancer mortality rate had increased to 105.4 per 100,000 and was twice that of the southern region and the state. Finally, there were 123 deaths due to lung cancer in Juneau County from 1995-1999, or 64% more than expected for the 5-year period.

Lung cancer is associated with several risk factors: tobacco use and exposure, environmental and occupational health hazards, social and economic factors, and access to health care.

• **Heart disease** accounted for 29% of all Juneau County deaths from 1996-1998, 2000. The county's death rate due to heart disease was 333 per 100,000 for the 4-year period, which is higher than the southern region (236) or the state (262).

Heart disease is associated with inappropriate use of alcohol and other substances, nutrition, tobacco use and abuse, obesity/physical inactivity, social and economic factors, and access to health care.

• **Stroke** is also a health issue for the county. Seven percent of all deaths in the county from 1996-2000 were attributable to stroke. The county's death rate per 100,000 for stroke from 1996, 1997, and 1999 was 93 compared to the southern region at 70 deaths and the state at 72 per 100,000.

Stroke is associated with inappropriate use of alcohol and other substances, nutrition, tobacco use and abuse, obesity and physical inactivity, social and economic factors, and access to health care.

• Data show that Juneau County's **diabetes** mortality rate (32.6 per 100,000) was much higher than the southern region (21.5) or the state (23.0) from 1995-1999. And, there were more hospitalizations due to diabetes (48 in 1998) and more deaths due to diabetes (38 from 1995-1999) than the expected numbers.

Diabetes is associated with nutrition, obesity and physical inactivity, social and economic factors, and access to health care.

• **Mental health** is an emerging concern in Juneau County. In 2000, there was a 60% increase (to 160 cases) of involuntary psychiatric hospitalizations from previous years (average 100 per year). Additionally, the county's rate of psychiatric hospitalizations (from 1996-2000) was 7.1 per 1,000 compared to 5.4 for the southern region and 6.3 for the state. Finally, Juneau County's mental disorder mortality rate (29.1 per 100,000) was higher than the southern region (22.1) or the state (26.3).

Mental health is associated with inappropriate use of alcohol and other substances, obesity and lack of physical activity, intentional injuries, social and economic factors, and access to health care.

• There were 19 **suicides** in Juneau County from 1995-1999. The county's suicide death rate 16.3 per 100,000 for the 5-year period, compared to the southern

region at 12.2 and the state a 11.5. Juneau County's suicide rate was also high compared to peer counties in the US.

Suicide is associated with inappropriate use of alcohol and other substances, obesity and lack of physical activity, intentional injuries, mental health, social and economic factors, and access to health care.

• The high **teen birth rate** has been identified as a local health concern, both in previous assessments and in the secondary data. Secondary data show that Juneau County's 5-year teen birth rate (1996-2000) was 46.4 per 1,000, which was higher than the southern region (27.9) and the state (35.5).

Teen birth rate is associated with communicable diseases, high-risk sexual behavior, social and economic factors, and access to health care.

 Over 25% of Juneau County's pregnant women received no care in their first trimesters. This is a higher percentage than the southern region, the state, or peer counties in the US.

First trimester prenatal care is associated with social and economic factors, and access to health care.

• **Tobacco use among adults, youth and pregnant women** is a significant health concern in Juneau County. Over one-quarter (26%) of adults aged 18 and older in Juneau, Adams, and Sauk Counties were identified as cigarette smokers in a 1993-1998 survey. This is a higher percentage than the southern region and the state, which each reported 23%. In a survey of youth in Necedah (6<sup>th</sup>-12<sup>th</sup> graders), 28% said they had smoked at least one cigarette within the past month. Forty percent of 11<sup>th</sup> and 12<sup>th</sup> graders said they had smoked in the past month. The percentage of women who used tobacco during pregnancy in Juneau County was higher than the state throughout the 1990s. For the year 1999, 27% of pregnant women in Juneau County smoked cigarettes compared to 17% for the state.

Tobacco use is associated with social and economic factors and access to health care.

 Child abuse and neglect is a growing health concern for the county. Child abuse and neglect rates in Juneau County were higher than the state throughout the 1990s. The number of cases increased by 25% between 1998 and 2000 for the Juneau County Human Service Department.

Child abuse and neglect is associated with social and economic factors, mental health, and intentional and unintentional injuries and violence.

• **Domestic violence rates** were higher in Juneau County than the state throughout the late 1990s. Juneau County had the 7<sup>th</sup> highest rate of reported domestic violence in the state for the combined years of 1998 and 1999.

Domestic violence is associated with social and economic factors, mental health, and intentional and unintentional injuries and violence.

## **Part VII: Recommendations**

- 1. Explore the feasibility of expanding services to address the growing health care needs of the elderly population.
- 2. Educate the community about the pervasiveness of lung cancer and deaths due to lung cancer in Juneau County as compared to other counties and the state. Develop a local campaign to address risk factors associated with lung cancer, with a focus on smoking cessation and environmental issues.
- 3. Building upon existing community outreach and healthy lifestyles programming, educate the community about the causes of heart disease, stroke, and diabetes. Encourage preventative measures and behaviors among community members focusing on exercise, weight reduction, alcohol consumption and drug use, and smoking cessation.
- 4. Educate the community about the importance of prenatal care for pregnant women in their first trimester and the importance of not smoking during pregnancy. Evaluate the effectiveness and accessibility of current prenatal care programs and address any barriers that pregnant women may incur in accessing them.
- 5. Develop programs that educate the community on the signs of mental disorders and suicide as well as prevention and intervention strategies for suicide.
- 6. Expand programming for area youth in order to encourage positive behaviors and to address problem areas including teen pregnancy. Build upon ongoing programming by the Juneau County Family Preservation home visitation project in order to reduce repeat teen pregnancies.
- 7. Increase awareness in the community about the rise in child abuse and neglect reports and domestic violence reports. Provide information on signs of child abuse and domestic violence as well as local resources. Target awareness campaign to both professionals in health care, schools, law enforcement, etc. and to the community at large.
- 8. Continue to discuss the three priorities identified in the community prioritization process with the local community leaders The three priority areas chosen were: 1) Access to primary care and preventative health services 2) Social and economic factors that influence health and 3) Tobacco use and exposure.
  - Organize task forces to address each issue and develop specific goals and strategies within each task force. Identify all existing organizations and committees addressing these three issues and the status of their activities. Integrate task force initiatives with ongoing programming.

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#### **APPENDIX A**

## **Healthy People-Juneau County**

At the October 3, 2002 Community Forum on Public Health Needs, participating individuals chose the following three health priorities:

- Access to Primary Care and Preventative Health Services
- Social/Economic Factors that Influence Health
- Tobacco Use/Exposure

In follow-up to October 3, 2002, the Assessment Protocol for Excellence in Public Health (APEX) Committee reviewed the evaluation comments from the Community Forum. The comments of the forum were very favorable and a willingness to become further involved was indicated by the participants in their comments. Since the majority of evaluations did not have the participant's name on them, the APEX Committee decided that the participants should be contacted and asked in what way they or their agency would be willing to become involved.

Each participant who did not indicate their name on the evaluation form was contacted per a postcard and asked what they or their agencies were willing to provide for Juneau County regarding the chosen three health priorities. Participants could select the following items:

- Financial support
- Committee member
- Spokesperson to provide education
- Other

Participants selecting "committee member" were asked to assist with the development of a workplan to address the three health priorities. The APEX Committee divided their membership into three groups. The groups were given a template workplan and asked to contact community constituents to work with them in completing the workplan for each objective. The committee groups were asked to write measurable objectives for each of the health priorities so that progress of the workplan could be monitored.

The following section provides the workplan of the APEX Committee and the community constituents for the three health priorities.

## HEALTHY PEOPLE JUNEAU COUNTY 2003 Community Health Improvement Plan

## **Health Priority: Tobacco Use and Exposure**

**Goal:** Juneau County residents will have increased access to appropriate and affordable tobacco cessation resources

**Strategy:** The Juneau County Tobacco-Free Coalition will meet with community partners to promote best-practice cessation strategies and the provision of smoking cessation programs in workplaces and other community settings.

**Baseline:** One healthcare system has been trained in 5 A's guidelines, but has not fully implemented 5 A's within healthcare system; Evidence-based cessation counseling offered through Health Department/WIC Project and quarterly at Mile Bluff Medical Center; 3 community residents trained in evidence-based youth cessation program

SHORT TERM	LONG TERM	ACTION STEPS	PARTNERS	PROGRESS INDICATOR
OBJECTIVES	OBJECTIVES	(types of outcomes for and by		(How will you measure your
2003-2005	2005-2008	when)		progress)
By 2005, 15	By 2008, 30	Present "Treating Tobacco Use	TF Coalition	# of healthcare providers
healthcare	healthcare	and Dependence – Clinical	members/supporters	attending 5A trainings
providers will	providers will	Practice Guidelines" as best-	representing healthcare	, 61 H
have	have	practice tobacco cessation	providers, community-	# of healthcare providers
implemented the	implemented the	strategy to area healthcare	service organizations,	reporting implementation of the
5 A's as outlined in the "Treating	5 A's as outlined in the "Treating	organizations, providers and associations	media, youth, religious	5A guidelines
Tobacco Use and	Tobacco Use and	associations	leaders, business leaders, and concerned citizens	# of individuals demonstrating
Dependence –	Dependence –	Identify providers interested in 5A	and concerned chizens	improved awareness,
Clinical Practice	Clinical Practice	training		knowledge, attitude and/or
Guidelines"	Guidelines"	a an in ig	Cessation Team, Mile Bluff	skills related to smoking
		Organization of 5A trainings for	Medical Center	cessation
		providers including provision of		
		CME credit as appropriate	Statewide tobacco partners – CTRI, UW extension	# of reported quit attempts
		Support trained providers with		# of adults reporting regular
		additional training and materials		tobacco use
		as needed		
		Use earned media of		# of youth reporting regular
		healthcare providers as a		tobacco use
		means of educating the		
		community of local cessation		# of pregnant women reporting
		resources		regular tobacco use

		Continued monitoring of 5A implementation via interviews and/or surveys		
By 2005, 5 worksites, schools or community-based organizations will newly offer evidence-based cessation programs	By 2008, 10 worksites, schools or community-based organizations will newly offer evidence-based cessation programs	Research all available evidence-based cessation programs for youth, adults and pregnant women  Promote on-site evidence-based cessation programs as a benefit to worksites, schools or community-based organizations  Identify worksites, schools or community-based organizations interested in providing cessation  Assist interested persons in identifying most appropriate cessation program  Assist interested persons in obtaining training on identified cessation program or partnering with trained program instructors to provide on-site services  Assist trained persons with coordination of cessation programs, as appropriate  Support trained persons with additional training and materials as appropriate  Use earned media coverage of worksites, schools, and community-based organizations as a means of increasing awareness in the community surrounding tobacco cessation resources	TF Coalition members/supporters representing healthcare providers, community- service organizations, media, youth, schools, law enforcement, religious leaders, business leaders, elected officials, and concerned citizens  Statewide tobacco partners – CTRI, ALA, WWHF, UW extension	# of persons trained as instructors for evidence-based cessation programs  # of worksites, schools or community-based organizations offering evidence-based cessation programs  # of individuals demonstrating improved awareness, knowledge, attitude and/or skills related to smoking cessation  # of reported quit attempts  # of adults reporting regular tobacco use  # of youth reporting regular tobacco use  # of pregnant women reporting regular tobacco use

Assist with the monitoring and evaluation of cessation programs, and the alteration of programs as needed	
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APEXplan cessation 2003.doc

#### **Health Priority: Tobacco Use and Exposure**

Goal: Juneau County residents will have decreased secondhand smoke exposure in public places

**Strategy:** The Juneau County Tobacco-Free Coalition will meet with community partners to facilitate the adoption of smoke-free policies in public places.

**Baseline:** County and 2 city municipalities have smoke-free building/vehicle policies; 3 dining establishments (8%) in Juneau County have smoke-free policies; 60% of worksites have smoke-free policies.

SHORT TERM	LONG TERM	ACTION STEPS	PARTNERS	PROGRESS INDICATOR
OBJECTIVES	OBJECTIVES	(types of outcomes for and by		(How will you measure your
2003-2005	2005-2008	when)		progress)
By 2005, all municipalities (cities, villages and townships) within Juneau County will have adopted smokefree building and vehicle policies.	By 2008, all municipalities will maintain and enforce enacted smoke-free building and vehicle policies.	Formation of a diverse community group that will facilitate community policy development surrounding secondhand smoke with regular meeting times  Development of an organizational identity for community group  Development of educational presentations and written materials  Completion of community education via presentations, media and displays  Collection of written endorsement of smoke-free policy support (organizations and individuals)  Communication with policymakers to determine level of support; Provide education as appropriate  Introduction of policy to policymakers	TF Coalition members/supporters representing healthcare providers, community- service organizations, media, youth, schools, law enforcement, religious leaders, business leaders, elected officials, and concerned citizens  Statewide tobacco partners – ACS, Smokefree WI	# of written supporters of smoke-free policies within municipalities  # of policymakers who support smoke-free policies  # of enacted municipality smoke-free building/vehicle policies

		Support adoption of policy		
		Monitor implementation and enforcement of policy		
By 2005, two municipalities will have adopted smoke-free dining or worksite policies protecting residents from exposure to secondhand smoke.	By 2008, four municipalities will have adopted smoke-free dining or worksite policies protecting residents from exposure to secondhand smoke.	Formation of a diverse community group that will facilitate community policy development surrounding secondhand smoke with regular meeting times  Development of an organizational identity for community group  Development of educational presentations and written materials  Completion of community education via presentations, media and displays  Collection of written endorsement of smoke-free policy support (organizations and individuals)  Communication with policymakers to determine level of support; provide education as appropriate  Introduction of policy to policymakers  Support adoption of policy  Monitor implementation and enforcement of policy	TF Coalition members/supporters representing healthcare providers, community- service organizations, media, youth, schools, law enforcement, religious leaders, business leaders, elected officials, and concerned citizens  Statewide tobacco partners – ACS, Smokefree WI	# of written supporters of smoke-free policies within municipalities  # of policymakers who support smoke-free policies  # of enacted municipality smoke-free dining/worksite policies

#### **Health Priority: Tobacco Use and Exposure**

Goal: Decreased percentage of Juneau County youth who report regular tobacco use

**Strategy:** The Juneau County Tobacco-Free Coalition will meet with community partners to ensure active youth participation in tobacco prevention efforts including peer education and FACT advocacy.

**Baseline:** 40% of Necedah youth grades 11<sup>th</sup> and 12<sup>th</sup> said that they had smoked in the last month. (Juneau County Health Needs Assessment, August 2002)

SHORT TERM OBJECTIVES 2003-2005	LONG TERM OBJECTIVES 2005-2008	ACTION STEPS (types of outcomes for and by when)	PARTNERS	PROGRESS INDICATOR (How will you measure your progress)
By 2005, 3 school districts in Juneau County will implement annual peer education addressing tobacco use in elementary and middle school classrooms	By 2008, 5 school districts in Juneau County will implement annual peer education addressing tobacco use in elementary and middle school classrooms.	Explore possibility of coordinating county-wide youth survey addressing tobacco knowledge, attitudes and behaviors  Coordinate implementation of survey, if feasible  Present peer education as an evidence-based tobacco prevention strategy to school administrators, school boards and faculty  Identify school contacts interested in implementing peer education  Recruit drug-free youth expressing an interest in becoming a peer educator  Provide training to youth and school contacts in peer education addressing tobacco use, exposure and marketing  Assist trained peer educators in securing mini-grants from CESA and other sources  Assist trained peer educators in coordination of providing education within classrooms	TF Coalition members/support ers representing healthcare providers, community- service organizations, youth-based organizations, media, youth, schools, law enforcement, religious leaders, business leaders, elected officials, and concerned citizens  Statewide tobacco partners – ALA, CESA, UW Extension	# of trained peer educators per school district  # of classrooms receiving peer education  # of times peer education occurs in the same classroom (teacher buy-in and support)  # of students demonstrating an increase in tobacco-related knowledge following peer education  # of students reporting their intentions to use tobacco following peer education  # of students reporting regular tobacco use

		Support trained peer education teams with additional training and classroom materials as needed Use earned media coverage of peer education as a means of increasing awareness in the community surrounding tobacco use and exposure  Continuously monitor and evaluate effectiveness of peer education sessions, and alter sessions as needed		
By 2005, 3 school districts within Juneau County will have a minimum of 10 active FACT members.  ("Active" is defined as being an organizer and participant in at least 2 FACT activism events annually)	By 2008, 5 school districts within Juneau County will have a minimum of 15 active FACT members.  ("Active" is defined as being an organizer and participant in at least 2 FACT activism events annually)	Explore possibility of coordinating county-wide youth survey addressing tobacco knowledge, attitudes and behaviors  Coordinate implementation of survey, if feasible  Present youth activism as a "promising practice" tobacco prevention strategy to school faculty, youth-based organizations, and youth  Identify youth and adult community contacts interested in implementing FACT activism events  Provide training to youth and school contacts in tobacco industry tactics and FACT activism  Assist FACT youth in securing mini-grants from FACT, CESA and other sources  Assist FACT members and adult community contacts in coordinating FACT activism events  Support FACT members with additional training and materials as needed	TF Coalition members/supporter s representing healthcare providers, community-service organizations, youth-based organizations, media, youth, schools, law enforcement, religious leaders, business leaders, elected officials, and concerned citizens  Statewide tobacco partners – FACT, Nixon Group, ALA, CESA, UW Extension	# of active FACT members  # of youth-led FACT activism events  # of students demonstrating an increase in marketing tactics of the tobacco industry following youth-led FACT activism events  # of students reporting their intentions to use tobacco following youth-led FACT activism events  # of students reporting regular tobacco use

Use earned media coverage of FACT events as a means of increasing awareness in the community surrounding tobacco industry marketing tactics	
Continuously monitor and evaluate effectiveness of activism events, and alter events as needed	

APEXplan youth 2003.doc

**Goal:** Affordable and accessible dental care

**Baseline:** 19.5% of Medical Assistance individuals received dental services in Juneau County (July 2000-June 2001)

		T		T
SHORT TERM	LONG TERM	ACTION STEPS	PARTNERS	PROGRESS INDICATOR
OBJECTIVES	OBJECTIVES	(types of outcomes for and by		(How will you measure your
2003-2005	2005-2008	when)		progress)
2003-2005  By 2005, 25% of Juneau County's Medical Assistance eligible individuals will receive dental services.	By 2008, 30% of Juneau County's Medical Assistance eligible individuals will receive services.	Provide case management of dental health needs through the HealthCheck Program.  Support legislation that will have an impact on dental access i.e. greater reimbursement, loan forgiveness to HPSA etc.  Work with DPH Chief Dental Officer to inform community partners of new dental initiatives and grant opportunities.  Support a dental representative on the Board of Health	Local Health Dept.  Board of Health Juneau Co. Providers Media Churches Businesses Elected officials citizens  Media Local health department Juneau County Providers Local Govt.	Monitor the percentage of Medical Assistance eligible individuals receiving dental services.

APEXplan dental access 2003.doc

Goal: Affordable and accessible dental care

**Baseline:** 2002- There is no regular and consistent Sealant Program is being offered to children with Medical Assistance.

SHORT TERM OBJECTIVES 2003-2005  By 2004 a sealant initiative will be a regular event in Juneau County  Medical Assistance children per year.  By 2008 a system will be in place to provide sealants to 50 Juneau County Medical Assistance children per year.  Brecruit volunteer dentists to assist with ongoing dental sealant program or the Ronald McDonald Charities.  ACTION STEPS (types of outcomes for and by when)  By 2004 a sealant initiative will be a regular event in Juneau County  By 2008 a system will be in place to provide sealants to 50 Juneau County McDonald Charities.  ACTION STEPS (types of outcomes for and by when)  By 2004 a sealant initiative will be a regular event in Juneau County  By 2008 a system will be in place to provide sealants to 50 Juneau County Providers Local Health Department  Invite local dentists to meet with Health Department to discuss access issues and discuss strategies to improve.  Continue to educate and support community water fluoridation.  Continue to educate and support community water fluoridation.  Continue to educate and support community water fluoridation.  Demonstrate a regular Sealant Clinic for Medical Assistance children to access				T	<u>,                                      </u>
By 2004 a sealant initiative will be a regular event in Juneau County  By 2008 a system will be in place to provide sealants to 50 Juneau County Medical Assistance children per year.  Invite local dentists to meet with Health Department to discuss access issues and discuss strategies to improve.  Continue to educate and support community water fluoridation.  Recruit volunteer dentists to assist to dassist to dassist to bear through a Seal-A-Smile Program or the Ronald McDonald Charities.  Board of Health & Health Department  Department  Local Health Department  Demonstrate a regular Sealant Clinic for Medical Assistance  Continue to educate and support community water fluoridation.	SHORT TERM	LONG TERM		PARTNERS	
By 2004 a sealant initiative will be a regular event in Juneau County  By 2008 a system will be in place to provide sealants to 50 Juneau County Medical Assistance children per year.  Invite local dentists to meet with Health Department to discuss access issues and discuss strategies to improve.  By 2008 a system will be in place to provide sealants to 50 Juneau County Medical Assistance children receiving sealant through sealant through sealant through sealant through sealant through bear provided by the Health Department.  Local Health Department  2001-11 Medical Assistance children received sealants at the Health Department's Sealant Clinic  Continue to educate and support community water fluoridation.  Demonstrate a regular Sealant Clinic for Medical Assistance	OBJECTIVES	OBJECTIVES	(types of outcomes for and by		(How will you measure your
By 2004 a sealant initiative will be a regular event in Juneau County  By 2008 a system will be in place to provide sealants to 50 Juneau County Medical Assistance children per year.  Invite local dentists to meet with Health Department to discuss access issues and discuss strategies to improve.  Continue to educate and support community water fluoridation.  By 2008 a system will be in place to provide sealants will be in place to provide sealants and support community water fluoridation.  Board of Health & Health Department  Department  Department  Monitor the number of Medical Assistance children receiving sealant through sealan	2003-2005	2005-2008	when)		
initiative will be a regular event in Juneau County  will be in place to provide sealants to 50 Juneau County Medical Assistance children per year.  Invite local dentists to meet with Health Department to discuss access issues and discuss strategies to improve.  Continue to educate and support community water fluoridation.  will be in place to provide sealants will be in place to provide sealants assist with ongoing dental sealant program either through a Seal-A-Smile Program or the Ronald McDonald Charities.  Local Health Department  Department  Local Health Department  Assistance children receiving sealant through sealant clinics provided by the Health Department.  Department  Juneau County Providers Local Govt. Local Health Dept.  Demonstrate a regular Sealant Clinic for Medical Assistance			·		
initiative will be a regular event in Juneau County  will be in place to provide sealants to 50 Juneau County Medical Assistance children per year.  Invite local dentists to meet with Health Department to discuss access issues and discuss strategies to improve.  Will be in place to provide sealants to 50 Juneau County Medical Assistance  Invite local dentists to meet with Health Department to discuss access issues and discuss strategies to improve.  Will be in place to provide sealants program either through a Seal-A-Smile Program or the Ronald McDonald Charities.  Local Health Department  Juneau County Providers Local Govt.  Local Health Dept.  Department  2001-11 Medical Assistance children receiving sealant through sealant clinics provided by the Health Department.  Continue to educate and support community water fluoridation.  Continue to educate and support community water fluoridation.  Demonstrate a regular Sealant Clinic for Medical Assistance	By 2004 a sealar	t By 2008 a system	Recruit volunteer dentists to	Board of Health & Health	Monitor the number of Medical
regular event in Juneau County  provide sealants to 50 Juneau County Medical Assistance children per year.  Invite local dentists to meet with Health Department to discuss access issues and discuss strategies to improve.  Continue to educate and support community water fluoridation.  provide sealants to So Juneau County Medical McDonald Charities.  Local Health Department  Local Health Department  Sealant through sealant clinics provided by the Health Department.  Sealant through sealant clinics provided by the Health Department.  Juneau County Providers Local Govt.  Local Health Department  Continue to educate and support community water fluoridation.  Continue to educate and support community water fluoridation.	-		assist with ongoing dental sealant	Department	Assistance children receiving
Juneau County  to 50 Juneau County Medical Assistance children per year.  Invite local dentists to meet with Health Department to discuss access issues and discuss strategies to improve.  Continue to educate and support community water fluoridation.  Smile Program or the Ronald McDonald Charities.  Local Health Department  Local Health Department  Juneau County Providers Local Govt. Local Health Dept.  Demonstrate a regular Sealant Clinic for Medical Assistance					
County Medical Assistance children per year.  Invite local dentists to meet with Health Department to discuss access issues and discuss strategies to improve.  Continue to educate and support community water fluoridation.  Local Health Department  Department  2001-11 Medical Assistance children received sealants at the Health Department's Sealant Clinic  Department.  Continue to educate and support community water fluoridation.  Demonstrate a regular Sealant Clinic for Medical Assistance	_				
Assistance children per year.  Invite local dentists to meet with Health Department to discuss access issues and discuss strategies to improve.  Continue to educate and support community water fluoridation.  Invite local dentists to meet with Health Department to discuss Local Govt. Local Health Dept.  Juneau County Providers Local Govt. Local Health Dept.  Sealant Clinic  Demonstrate a regular Sealant Clinic for Medical Assistance	Janeau county		_	Local Health Denartment	
children per year.  Invite local dentists to meet with Health Department to discuss access issues and discuss strategies to improve.  Continue to educate and support community water fluoridation.  Invite local dentists to meet with Health Department to discuss Juneau County Providers Local Govt. Local Health Dept.  Continue to educate and support Community water fluoridation.  Continue to educate and support Community water fluoridation.  Demonstrate a regular Sealant Clinic for Medical Assistance		•	reportate charties.	Local Ficular Department	Вераганена.
Health Department to discuss access issues and discuss strategies to improve.  Continue to educate and support community water fluoridation.  Health Department to discuss Local Govt.  Local Health Dept.  Children received sealants at the Health Department's Sealant Clinic  Children received sealants at the Health Department's  Sealant Clinic  Demonstrate a regular Sealant Clinic for Medical Assistance		, 100.010	Invite local dentists to meet with		2001-11 Medical Assistance
access issues and discuss strategies to improve.  Local Govt. Local Health Dept.  Continue to educate and support community water fluoridation.  Local Govt. Local Health Dept.  Demonstrate a regular Sealant Clinic for Medical Assistance		children per year.		Juneau County Providers	
strategies to improve.  Local Health Dept.  Sealant Clinic  Continue to educate and support community water fluoridation.  Demonstrate a regular Sealant Clinic for Medical Assistance			•		
Continue to educate and support community water fluoridation.  Demonstrate a regular Sealant Clinic for Medical Assistance					·
community water fluoridation.  Demonstrate a regular Sealant Clinic for Medical Assistance			strategies to improve.	госаг пеанн рерг.	Sediant Cillic
community water fluoridation.  Demonstrate a regular Sealant Clinic for Medical Assistance					
Clinic for Medical Assistance					
			community water fluoridation.		
children to access					
					children to access

APEXplan dental access #2 2003.doc

**Goal:** Affordable and accessible dental care

**Baseline:** Juneau County Health Department/schools do not have a fluoride program and only 3 public community water systems have fluoride in Juneau County

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SHORT TERM	LONG TERM	ACTION STEPS	PARTNERS	PROGRESS INDICATOR
OBJECTIVES	OBJECTIVES	(types of outcomes for and by		(How will you measure your
2003-2005	2005-2008	when)		progress)
		,		, ,
By 2005	By 2008, 4 public	Juneau County Health	Local Health Department	
implement a	community water	Department will apply to WDHFS		Demonstrate a fluoride program
fluoride program	systems will have	for a fluoride grant. Incorporate	Schools	for children in Juneau County.
for children in	fluoride in Juneau	one or all fluoride programs for	30.100.5	Tor cimaren in saneau county.
Juneau County.	County	children:		
Sancaa County.	Country	Fluoride rinse in schools		
		Fluoride drops for infants		Increase community water
		Fluoride tablets for children	Local Health Department	fluoridation:
		Tidoride tablets for enliaren	Local Govt. Juneau County	2002 the following
			Providers	communities have
			Businesses	fluoridation
			Citizens	Mauston
		Educate and support community		
		Educate and support community	Media	Elroy
		water fluoridation	Churches	Wonewoc

APEXplan dental access #3 2003.doc

**Goal:** Affordable and accessible health care

**Baseline:** 1996-2000 (Rate per 1,000 for average preventable hospitalizations for Juneau County was 23.6)

SHORT TERM	LONG TERM	ACTION STEPS	PARTNERS	PROGRESS INDICATOR
OBJECTIVES	OBJECTIVES	(types of outcomes for and by		(How will you measure your
2003-2005	2005-2008	when)		progress)
By 2005 a self-care manual will be distributed to the people of Juneau County.	By 2008 a 20% reduction is seen in preventable hospitalizations	Hess Memorial Hospital's grant writer will submit grants to purchase and distribute the self-care manual  Aggressive dissemination of Healthy Start and Badger Care brochures i.e. The billing personnel at clinics and hospital will provide each under and uninsured individual family a brochure and support them to access the service.  Local health department will provide Healthy Start and Badger Care coverage in their newspaper column "Public Health Highlights" twice a year.  Economic Support staff will provide regular educational updates to the community and local providers.	Hess Memorial Hospital  Local Health Dept. Juneau County Providers Community services Billing staff Local health department  Juneau County Human Services staff	Monitor the "Average Preventable Hospitalization Rate" for Juneau County (Preventable hospitalizations are defined as "hospitalizations for conditions where timely and effective ambulatory care can reduce the likelihood of hospitalization")

APEXplan medical access 2003.doc

**Goal:** Affordable and accessible health care

**Baseline:** 2000 (75% of pregnant women received their prenatal care in the first trimester)

SHORT TERM OBJECTIVES 2003-2005 (types of outcomes for and by 2005-2008 (types of outc					
By 1/2004 an assessment of all Juneau County mothers giving birth in 2003 will be done to determine when the mother sought their first prenatal care visit.  By 2/2005 steps to eliminate the barriers to1st trimester prenatal care identified in the 2003 assessment will begin implementation.  By 2/2005 steps to eliminate the barriers to1st trimester prenatal care in the first trimester of their pregnancy.  Local Health Dept.  Monitor the "first prenatal care visit" statistics for Juneau County mothers through the Public Health Profiles  Tommunity organizations  Information about the assessment will be shared with community partners  Research strategies to improve the access to prenatal care with	SHORT TERM	LONG TERM	ACTION STEPS	PARTNERS	PROGRESS INDICATOR
By 1/2004 an assessment of all Juneau County mothers giving birth in 2003 will be done to determine when the mother sought their first prenatal care visit.  By 2/2005 steps to eliminate the barriers to1st trimester prenatal care identified in the 2003 assessment will begin implementation.  By 2/2005 steps to eliminate the barriers to1st trimester prenatal care in the first trimester of their pregnancy.  Local Health Dept.  Monitor the "first prenatal care visit" statistics for Juneau County mothers through the Public Health Profiles  Tommunity organizations  Information about the assessment will be shared with community partners  Research strategies to improve the access to prenatal care with	OBJECTIVES	OBJECTIVES	(types of outcomes for and by		(How will you measure your
By 1/2004 an assessment of all Juneau County mothers giving birth in 2003 will be done to determine when the mother sought their first prenatal care visit.  By 2005 steps to eliminate the barriers to1st trimester prenatal care identified in the 2003 assessment will begin implementation.  By 2005 steps to eliminate the barriers to1st trimester of new mothers through the birth certificate reports to determine the mothers' reasons for not accessing prenatal care in the first trimester of their pregnancy.  Information about the assessment will be shared with community partners  Local Health Dept.  Monitor the "first prenatal care visit" statistics for Juneau County mothers through the Public Health Profiles  Community organizations  Hess Memorial Hospital  Local Health Dept.  Research strategies to improve the access to prenatal care with	2003-2005	2005-2008	` ' '		,
assessment of all Juneau County mothers giving birth in 2003 will be done to determine when the mother sought their first prenatal care visit.    an assessment of new mothers through the birth certificate reports to determine the mothers' reasons for not accessing prenatal care in the first trimester of their pregnancy.    an assessment of new mothers through the birth certificate reports to determine the mothers' reasons for not accessing prenatal care in the first trimester of their pregnancy.    Juneau County Providers   County mothers through the Public Health Profiles					progress,
	assessment of all Juneau County mothers giving birth in 2003 will be done to determine when the mother sought their first prenatal care	eliminate the barriers to1st trimester prenatal care that are identified in the 2003 assessment will begin	an assessment of new mothers through the birth certificate reports to determine the mothers' reasons for not accessing prenatal care in the first trimester of their pregnancy.  Information about the assessment will be shared with community partners  Research strategies to improve the access to prenatal care with	Juneau County Providers Community organizations Hess Memorial Hospital	County mothers through the

APEXplan medical access #2 2003.doc

**Goal:** Affordable and accessible health care

**Baseline:** 2002 (100% of Juneau County Providers have contracts to provide services to the Wisconsin Well Women Program)

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SHORT TERM	LONG TERM	ACTION STEPS	PARTNERS	PROGRESS INDICATOR
OBJECTIVES	OBJECTIVES	(types of outcomes for and by		(How will you measure your
2003-2005	2005-2008	when)		progress)
Maintain the contracts of 100% of Juneau	By 2008 Juneau County demonstrates a	Local health department will be a liaison to Juneau County providers for any issues	Local Health Dept.	Monitor the breast cancer mortality rate for Juneau County.
County Providers	decrease in	concerning the WWWP		(For the years of 1993-1997 the
to provide the	breast cancer	TI 14040415 1 65 111 11	Local Health Dept.	rate was 20.6 per 100,000.)
services of WWWP.	mortality rate and cervical cancer	The WWWP staff will provide	Juneau County Providers	Monitor the actual and
VVVVVP.	morbidity.	program-related information to partnerships for their distribution.	Community services Churches	expected number of cervical
	morbialty.	partierships for their distribution.	Citatories	cancers for Juneau County.
		WWWP will provide outreach		(For 1997 their were 11 cases
		through news media, churches,	Media	of cervical cancer and the
		community events and etc. to	Local Health Department	expected number was 3 cases)
		increase utilization of the program	Juneau County Providers	Monitor the number of
		Public education indicating the		screenings provided through
		need for regular screening to		the WWWP in Juneau County
		detect breast and cervical cancer		(2001 71 mammography & 80
				pap/pelvic screenings)
				ADEX I

APEXplan medical access #3 2003.doc

**Goal:** Affordable and accessible mental health services

Baseline: No consistent infrastructure is in place for public education and promotion of mental health

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SHORT TERM	LONG TERM	ACTION STEPS	PARTNERS	PROGRESS INDICATOR
OBJECTIVES	OBJECTIVES	(types of outcomes for and by		(How will you measure your
2003-2005	2005-2008	when)		progress)
By 2004	By 2008 Juneau	Explore different ways to	Juneau County Mental	Reduced suicide rates
education on a	County will	outreach the general public i.e.	Health Providers	
regular basis will	reduce expenses	Listing of mental health services	School districts	Increase knowledge of the
be given to the	associated with	and support groups in the media,	Media	public about mental health
general public on	increased	school newspaper, Cable, etc.		resources
mental health	hospitalizations	Establish an infrastructure to		1.00001.000
services that	for mental health.	promote mental health.	Juneau County Human	Better family relationships
already exist	Tor morear rearen	promote mental median	Service Mental Health	demonstrated by decrease in
an eddy exist	Promotion of	Reduce the stigmatism of mental	Providers	domestic violence, and child
	mental health will	health by developing mental	Hess Memorial	abuse and neglect
	be demonstrated	health awareness campaigns and	Juneau County Private	abase and neglect
	through the	disseminating public information	Providers	
	media on a	about mental health to empower	Fiovideis	
	regular basis	individuals to seek help.	Media	
	regulai basis	individuals to seek fielp.		
	To alicial calaccill	Deculey Dublic Comices	Juneau County Mental	
	Individuals will	Regular Public Services	Health Providers	
	experience a	Announcements about a variety		
	reduction in	of mental health issues and		
	discrimination	where to go for help are available		
	and stigma	to the public.		
	associated with			
	mental illness.			

APEXplan mental 2003.doc

**Goal:** Affordable and accessible mental health services

**Baseline:** No consistent infrastructure is in place for professional education and partnership in addressing mental health in Juneau County

	•			
SHORT TERM	LONG TERM	ACTION STEPS	PARTNERS	PROGRESS INDICATOR
OBJECTIVES	OBJECTIVES	(types of outcomes for and by		(How will you measure your
2003-2005	2005-2008	when)		progress)
		,		, ,
By 12/2004	Current and	Partner with the Health Officer's	Juneau County Human	Increased use of treatment
provide education	consistent	current newsletter to providers to	Services Mental Health	services by residents.
to local providers	standards of	provide mental health statistics	Providers	Services by residents.
on strategies to	mental health	primarily on a local level, new	Hess Memorial	Reduced incidents of suicides.
assess mental	practice are in	screening forms, resources, and	Tiess Fiemoriai	Reduced incluents of salcides.
illness and when	place in Juneau	treatment issues. Offer inservices		Reduced domestic and child
to refer.	•	to groups of providers i.e.		abuse
to refer.	County.		Juneau County Board of	abuse
	Decade have	physicians, home health nurses,	Juneau County Board of	Ciamaga indicating professional
	People have	public health staff etc.	Supervisors	Signage indicating professional
	improved access			mental health services
	to mental health	Advertise the Juneau County		
	services	mental health services better by		Four educational sessions will
		having signage on the outside of	Juneau County Human	be provided
		the building and through media	Service mental health	
			providers	Four PSA/year with an effort for
		Provide Public Service	Hess Memorial	joint PSAs
		Announcements supported by		
		many providers in Juneau County		
		promoting mental health together		
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APEXplan mental #2 2003.doc

**Goal:** Increase public awareness of social/economic issues that influence Juneau County's high rate of suicide.

**Baseline:** 1995-1999 (19 deaths or 16.3 deaths per 100,000).

SHORT TERM OBJECTIVES	LONG TERM OBJECTIVES	ACTION STEPS (types of outcomes for and by	PARTNERS	PROGRESS INDICATOR (How will you measure your
2003-2005	2005-2008	when)		progress)
By 12/30/04 an awareness campaign will be broadcast on	By 12/30/08 Juneau Co. will experience a 10% decrease in	Publicize information for individuals and families experiencing high stress.	WRJC radio Star-Times Newspaper	Regularly monitor local and state reports of deaths due to suicide.
local cable and radio quarterly	the number of deaths attributed	Public service announcements will be broadcast in/on local media.	Juneau Co. Human Services	4 PSA's per year
	to suicide.		Local cable TV channel	
		Publications will include signs and symptoms of despondency, crisis response, and referral for services	Police departments	
		(where to go, who to talk to, what to do).	Hess Memorial Hospital	
		,	Mental health providers	
		Monitor Wisconsin Office of Rural Health for grants to offset marketing costs.	Juneau Co. Coalition	
		J	Against Domestic Violence	
			Community Organizations	
			Concerned citizens	

**Goal:** Increase public awareness of social/economic issues that influence health and high teen birth rate.

**Baseline:** 1995-1999 (Births to teens numbered 14% of all Juneau County births).

	T	T		T
SHORT TERM	LONG TERM	ACTION STEPS	PARTNERS	PROGRESS INDICATOR
OBJECTIVES	OBJECTIVES	(types of outcomes for and by		(How will you measure your
2003-2005	2005-2008	when)		progress)
		- /		ļ <b> </b>
By 12/30/05 the	By 12/30/08 the	Aggressively monitor current teen	Family Preservation and	Monitor teen birth rates for
number of births	number of births	,		
		parents through WIC, Family	Support	Juneau County.
to teens will be	to teens will be	Preservation, and Support,		
reduced by 10%.	reduced by 15%.	Prenatal Care Coordination, and	WRJC radio	
		other programs to reduce the		
		number of repeat teen	Local cable TV	
		pregnancies.		
			Juneau Co. Health	
		Utilize public awareness campaign	Department	
		to illustrate realities faced by too	Department	
		-	Llaca Managrial Llacrital	
		young, unprepared parents.	Hess Memorial Hospital	
		Sponsor discussion group of	Middle & High Schools	
		current teen parents, "What		
		intervention(s) could have	Family Planning	
		prevented or delayed your		
		pregnancy?"	Health Services	
		programe, i	Treater Services	
			Juneau Co. Providers	
			Julieau Co. Flovideis	

**Goal:** Increase public awareness of social/economic issues that influence health and lead to an increased child abuse and neglect caseload for Juneau County Human Services Department.

**Baseline:** (The Juneau County Department of Human Service 2000 Annual Report to the County Board reported that the number of child abuse and neglect cases for the department rose 25% between 1998 and 2000).

SHORT TERM OBJECTIVES	LONG TERM OBJECTIVES	ACTION STEPS (types of outcomes for and by	PARTNERS	PROGRESS INDICATOR (How will you measure your
By 12/30/04 an awareness campaign will be broadcast quarterly, with tips on child safety and parent attentiveness	By 12/30/08, substantiated incidents of child abuse and neglect will decrease by 10%.	when)  Parenting classes by UW Extension.  Publicize information directed to the development of alternative parental behaviors (positive discipline, time out, stress reduction, and other issues as identified).  Home visitation by staff from DHS, and/or FP&S as needed, to work directly with families determined to be "high risk" for abuse/neglect.	WRJC radio Star-Times Newspaper Juneau Co. Human Services Local cable TV channel Police departments Hess Memorial Hospital Family Preservation & Support Juneau Co. Coalition Against Domestic Violence UW Extension Family Living Programs Community partners Concerned Citizens	Monitor Annual report to County Board to determine whether intervention promotes decline in incidents of abuse or neglect of children.  Monitor child abuse and neglect rates. 1998: Juneau 23.7/1000 State 33/1000  Monitor domestic violence rates where children are present 1998 Juneau 8.2/1000 State 6.4/1000

**Goal:** Interact with organizations whose goals include positively affecting low annual per capital personal income and poverty to positively affect the health of the poor in Juneau County.

**Baseline:** (Family Health Survey 1994-1998 reports that 14% of Juneau Co. residents over age 65 have one or more chronic illnesses. Labor Market participation rates are fifth lowest in the state of Wisconsin, and income remains well behind that of the state and the nation.

SHORT TERM	LONG TERM	ACTION STEPS	PARTNERS	PROGRESS INDICATOR
OBJECTIVES	OBJECTIVES	(types of outcomes for and by		(How will you measure your
2003-2005	2005-2008	when)		progress)
By 12/30/03 outreach efforts by county economic development groups, the Job Center, and heath programs to offer screening clinics for early intervention of chronic illnesses.	Reduce incidence of onset of chronic illness by 10% through proactive intervention	Offer health screening clinics, i.e. diabetes, hypertension, and elevated serum cholesterol, etc.  Develop an event such as Juneau County Health Fair with private sector and public sector cooperation. (Making this annual event is the ultimate goal).  Promote health life-style living in schools, homes, businesses, etc.	Economic development groups  Healthcare providers  Hess Memorial Hospital  Community Service Organizations  Media  Youth  Churches  Businesses  Concerned citizens  Schools	Monitor statistics published in Family Health Survey, labor market information, housing indicator surveys, etc.

#### **APPENDIX B**

# A Report on Farmers' Healthcare, Insurance and the Impact of the Partners In Agricultural Health Project For Juneau County, Wisconsin

2003

Prepared by the
Wisconsin Office of Rural Health

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#### **Executive Summary**

The farm population Juneau County is similar to the farm population across Wisconsin in many ways. Like the state, the farm industry in Juneau County is highly dependent on Dairy as well as Cattle and Calves and Corn for Grain. Unlike the state, Juneau County's top five commodities include Other Crops (potatoes, peanuts, etc.) and Fruits, Nuts and Berries.

There are approximately 654 farmers in Juneau County, which accounts for 5% of the overall population. Although the overall population in Juneau County and nonfarm employment are increasing, the number of full-time farms decreased in the mid-1990s. Juneau County experienced a loss of 19% of its fulltime farms from 1992 to 1997 compared to a 15% for the state. The percentage of farms with lower value of sales (below \$10,000 annually) grew in Juneau County by 16%, while the percentage of farms with value of sales over \$10,000 fell by 14% from 1992 to 1997. This trend is similar to that of the state for the same five years.

The Partners In Agricultural Health (PAH) project has just completed the final year of a federally funded Rural Health Outreach Grant. A network of organizations (five area hospitals, three county health departments, Rural Wisconsin Health Cooperative (RWHC), Southwest Area Health Education Center (SW AHEC), and the Wisconsin Office of Rural Health (WORH)) implemented the PAH project in 1998 to address the health promotion and disease and injury prevention needs of the farmers, their families and agricultural laborers in Adams, Juneau and Sauk Counties. As part of PAH, the Wisconsin Office of Rural Health evaluated the project through a series of stakeholder interviews in the three county area to ascertain farmers' current healthcare issues, insurance needs and their assessment of the PAH project. Ten farmers and professionals whose work brings them into contact with farmers (agricultural extension agents, farm co-op representative, etc.) were interviewed in Juneau County. The results of the Juneau County interviews are reported in this document along with some basic demographic information on the farming industry in Juneau County.

Ten individuals in Juneau County participated in telephone questionnaires as part of the Partners in Agricultural Health project. Interviewees included farmers and other professionals employed in farm-related fields. One of farmers' most prominent health concerns, according to the interviews, is getting access to affordable health services and affordable, comprehensive health insurance. There was a perception among interviewees that many farmers have no insurance. When reflecting on farmers' insurance issues, some interviewees made a distinction between young farmers with families and elderly farmers or those without children in the household. Interviewees thought that families with children found ways to get insurance coverage, particularly through seeking off-farm work. Interviewees felt that older farmers who were not yet eligible for Medicare, but who did not have children at home, were more likely to forego insurance. The main reason for this decision was assumed to be the high cost of premiums, estimated at \$400-\$800 for a single policy and \$1,000-\$2,000 for a family policy.

The most common ways that farmers got insurance, according to interviewees, were through the private market or through off-farm employment. Health insurance through off-farm employment tended to be the most popular venue because these policies were viewed as less expensive, more comprehensive and more stable over time. Full-time farmers without outside employment were limited to purchasing insurance through the private market. In general, interviewees expressed frustration with the process of getting access to good insurance for three reasons:

 It is time-consuming and difficult to research and identify good, comprehensive and legitimate insurance plans.

- Most insurance plans offered to farmers either have high premiums, co-pays and deductibles or cover only major medical not preventive care.
- Once farmers choose and purchase insurance products, the policies may be cancelled so that the search for insurance must start over again.

Two other sources of health insurance for farmers were mentioned: Medicare and insurance through a farm cooperative or farm corporation. There was a general perception that buying insurance through a dairy cooperative was not very common. Dairy cooperative policies were thought to be roughly equivalent in quality to privately purchased insurance and not much less expensive. Insurance through farm corporations was also thought to be a limited option for the few farmers who worked for a larger corporation but did not own their own land. Medicare was mentioned, as would be expected, as an option for those 65 and older.

Interviewees felt that there were many barriers for farmers when it came to getting access to affordable insurance. The most common illustrations were that farming is a high-risk profession and that the average of age of farmers is high. Both of these issues drive up the cost of insurance. Other explanations were that the farm economy is tight and farmers do not make enough money to pay for insurance and that farmers do not buy insurance as a group so they do not benefit from group discounts.

Other challenges faced by farmers are linked specifically to the farm lifestyle. Farming is a labor-intensive profession, and there is a perception that farming today takes more time than in the past. Farmers do not always feel that they can take time from the farm to go to doctors' appointments, particularly for preventive care and screenings.

The interviewees generally view the local health system in Juneau County positively. The system, however, presents some barriers to farmers seeking health care services. Farmers need to be able to schedule appointments in the late afternoon or evening, and they need to be able to schedule appointments on short notice to accommodate their work schedules. If clinics do not offer appointments for these times, farmers may end up going to the ER for non-emergency health concerns. Lack of continuity of care can also be a challenge. Farmers may be less likely to follow up on a health concern if they cannot do so with their own doctors.

The Partners in Agricultural Health Program, according most interviewees, was a valuable addition to the health system in Juneau County. Many interviewees viewed PAH screenings positively because they were free and were held in places where farmers tend to meet. This helped overcome the barriers of cost and taking time out of the farming schedule. Educational materials were also viewed as useful. Interviewees felt that the fact that PAH was helping health care professionals understand farmers' health needs and meet them in their own environments were good building blocks.

Challenges associated with the project tended to stem from grant logistics. Interviewees felt that the program was too short to have become well known or be fully utilized. This was generally viewed as a result of short-term funding through a grant. Staff turnover early in the project was also viewed as a challenge and a result of short-term funding. Some interviewees felt that the program could have been publicized better. A few thought that there could have been better support for farmers who participated in screenings and who needed follow up care. Most interviewees who were familiar with PAH felt that the screenings and education should be continued after the grant ends. Most felt that these were very useful parts of the project and farmers would continue to benefit from them. Few interviewees felt that farmers would be willing to pay a fee for PAH services. Those interviewees that did say farmers would be willing to pay said that nominal fees ranging from \$5-15 for basic screenings and services would be appropriate. Most felt that charging a fee would become a barrier to farmers.

#### Background

Lack of insurance and underinsurance are major challenges to farmers according to three recent research studies (Whitaker, 2002), (Foltz, 2003) and (Appleby, 2001). While approximately 6% of all Wisconsin residents are uninsured at any given point in time (Wisconsin Department of Health and Family Services, 2001), up to 10% of farmers in Wisconsin are uninsured (Appleby, 2001). Moreover, 20% of all Wisconsin dairy farmers and 30% of small dairy farmers (fewer that 50 cows) are uninsured (Foltz, 2003).

For those farmers who do have health insurance, many lack coverage for basic preventive services, that is, they are considered "underinsured." Sixteen percent of Wisconsin farmers are considered underinsured compared to only 9% of non-farm self-employed people and 4% of wage/salary workers (Whitaker, 2002). A full 80% of dairy farmers are underinsured in Wisconsin. Most insured dairy farmers carry policies with major medical coverage only and with high deductibles (Foltz, 2003).

Many farmers who do have health insurance coverage purchase private policies at relatively high costs. Over half (56%) of Wisconsin farmers purchase insurance privately compared to 43% of nonfarm self-employed people and 9% of wage/salary workers (Whitaker, 2002). The Whitaker study (2002) showed that farm households with privately purchased family plans paid an average of \$260 per month in premiums compared to \$115 for nonfarm self-employed households and \$69 per month for wage/salary households. Farmers paid over twice as much as nonfarm self-employed people in monthly premiums and nearly four times as much as wage/salary workers. The Appleby study (2001) reported monthly premiums as high as \$884 for privately purchased family coverage for Wisconsin farmers.

Furthermore, the data suggest that nonfarm self-employed people have access to different and more comprehensive health insurance policies than do farmers. One study showed that 28% of farmers with privately purchased insurance lacked coverage for preventive services compared to only 9% of nonfarm self-employed people (Whitaker, 2002).

Another common strategy among farmers is to seek off farm employment that offers health insurance coverage as a benefit. While 38% of farmers do have employer-based insurance, this is still a lower percentage than other groups of workers. By comparison 49% of nonfarm self-employed and 84% wage/salary workers have employer-based insurance (Whitaker, 2002). For those farmers with nonfarm employer-sponsored insurance, premiums range from \$50 to \$200 per month for single and family coverage (Appleby, 2001). Even if the household has a member with outside employment, however, farmers are less likely to have employer-based insurance (58%) than nonfarm self-employed people (75%). Off the farm employment, then, does not guarantee access to employer-based insurance for all farmers (Whitaker, 2002).

Although farmers pay more for insurance than other groups of workers, their health does not appear to be any worse than nonfarm self-employed people or wage/salary workers. In self-reported health status assessments, 70% of people in all three categories reported having "Excellent" or "Very Good" health. Only 17% of farmers reported a limiting health condition compared to 24% of nonfarm self-employed people (Whitaker, 2002).

Another interesting comparison shows that farmers and farm families devote more time to their work on the farm than do nonfarm self-employed people. Farmers devote an average of 64 hours per week to their business compared to 48 hours by nonfarm self-employed people (Whitaker, 2002).

In the Whitaker study (2002), a smaller percentage of farmers reported having regular or recent medical and dental visits than other workers as shown by the following statistics.

- 31% of farmers had not visited a doctor in the past year compared to 20% of nonfarm selfemployed people and wage/salary workers.
- 52% of farmers had had no check-up in the past year compared to 46% of nonfarm selfemployed people and 43% of wage/salary workers.
- 32% of farmers had no dental visit in the past year compared to 22% of other selfemployed and 20% of wage/salary workers.

One group of farmers was asked how they would prefer to obtain insurance (if they or someone in their household were uninsured and wanted insurance coverage). Three quarters of those with a preference indicated they would prefer government-sponsored insurance. Other preferences included purchasing insurance through a farmer trade association, fraternal order or cooperative (Appleby, 2001).

In summary, the three studies show that farmers are more likely to be uninsured or underinsured than other workers, particularly small dairy farmers. Farmers with insurance tend to purchase it privately or through a family members' employer-based policy from an off farm job. Farmers tend to pay more for their insurance policies than other groups of employed people, and they tend to have less comprehensive coverage, frequently lacking coverage for preventive care. Farmers' health seems to be on par with other groups of employed people, yet they tend to have fewer medical and dental visits. Farmers who are uninsured themselves or who have an uninsured family member may be open to government-sponsored insurance or purchasing insurance through a farmer trade association, fraternal order or cooperative.

#### **Purpose of PAH Evaluation**

The Partners in Agricultural Health project was designed to address farmers' health needs given the reality that farmers tend to be uninsured, underinsured and/or potentially difficult to reach due to the demands of the farming industry. As part of the evaluation, PAH project partners wanted to determine how effective PAH activities and services had been in addressing farmers' health needs in this context. The format chosen for the evaluation, personal over-the-phone interviews with farmers, also posed an opportunity to gather updated information on health insurance issues for farmers in the three county area. The purpose of the evaluation, then, is to document the impact of the PAH project and to provide up-to-date information on local farmers' healthcare and insurance needs.

## Methodology

The PAH coordinators identified a group of farmers and professionals whose work brings them into contact with farmers (agricultural extension agents, farm co-op representative, etc.) in each county. A letter was sent via US mail to all potential interviewees, some who had participated in PAH in the past and some who had not. Following the letter, a WORH representative contacted the interviewee by telephone and asked if they would be willing to participate in a 30-45 minute interview. If they said yes, WORH representatives scheduled a time to call them back and conduct the interview. WORH staff attempted to contact each potential interviewee by phone at least three times at varied hours (evening, morning and afternoon). Some of the people on the original contact list were unwilling to participate. Ten Juneau County residents were interviewed in addition to 19 from Adams and Sauk Counties.

Each interviewee was asked a series of structured open-ended questions (see Appendix). Five questions concentrated on the predominant local health and health insurance issues for farmers. The next five questions were related to the PAH project. If the interviewees had not heard of PAH or had not participated in any PAH events, they did not answer the PAH specific questions. The results of all Juneau County interviews were compiled in this report. The results are rarely reported in terms of percentages or statistics in this document because statistical presentation of qualitative data can sometimes be misleading as can statistical representation of a small sample. Rather, the writers have chosen to report raw numbers selectively and to summarize the types of responses given by the interviewees.

In addition to this report, county specific reports for Adams and Sauk County and a compilation report for all three counties have been produced and distributed by WORH.

#### Farming in Juneau County

#### **Population and number of farms**

According to the 1997 Census of Agriculture, there are approximately 654 farmers in Juneau County. This is approximately 5% of the total population (11,333). The average size of a Juneau County farms is 259 acres. Over half of the farms (53%) were fulltime operations in 1997. The table below summarizes these statistics (Department of Economics, 2002) and (US Department of Agriculture, 1997).

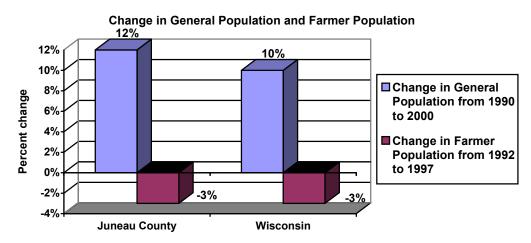
1997 Farm Population in Juneau County				
Total population (2000)	11,333			
Number of farm/farmers	654			
Number of full-time farm/farmers	351			
Average size of farms in acres	259			

Source: (Department of Economics, 2002) and (US Department of Agriculture, 1997)

## Change in population and farm population in the 1990s

The number of farms decreased for Wisconsin in the mid-1990s. From 1992 to 1997, Wisconsin lost 3% of its farms. Likewise, Juneau County lost 3% of its farms overall in the same 5 years (US Department of Agriculture, 1997).

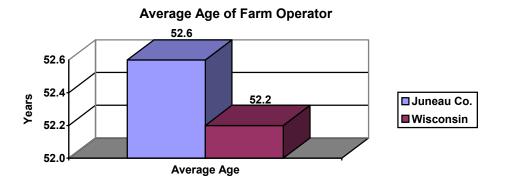
Although the state and the county lost farmers, both experienced overall population growth in the 1990s. Juneau County's population increased by 12%, while the state increased by 10%. See chart below (US Census, 2000) and (US Department of Agriculture, 1997).



Source: (US Census, 2000) and (US Department of Agriculture, 1997)

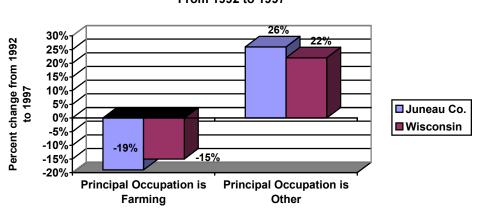
#### **Farmers and farm operators**

The majority of farm operators in Juneau County are male (92%) and white (100%). Their average age is 52.6, only slightly older than the state average. See chart below (US Department of Agriculture, 1997).



Source: (US Department of Agriculture, 1997)

The percentage of farm operators who reported that their primary occupation was farming decreased in Juneau County by 19% from 1992 to 1997 compared to a 15% decrease for Wisconsin. There was a corresponding increase of 26% in the percentage of farm operators in Juneau County with a non-farm principal occupation. This compares to a 22% increase for the state. This indicates an increase in the number of part-time farms, either because full-time farmers are becoming part-time farmers or because new farmers are entering the field on a part-time basis (US Department of Agriculture, 1997).



Change in Principal Occupation of Farm Operators From 1992 to 1997

Source: (US Department of Agriculture, 1997)

#### Farm size

The average size of farms also decreased in Juneau County as shown in the following table. The county experienced a 10% decrease in the average size of farms and 13% decrease in the amount of land in farms. These are much larger decreases than the state experienced overall (US Department of Agriculture, 1997).

Percentage change in Farms and Farmland from 1992 to 1997				
	Juneau County	Wisconsin		
Land in farms (Percentage change)	-13%	-4%		
Average size of farms	-10%	0%		

#### **Top Commodities**

Juneau County's agricultural landscape is dominated by dairy, as is the state of Wisconsin (see table below). Corn for grain and cattle and calves are also among Juneau County's top five commodities. When compared by Value of Sales to other Wisconsin counties, Juneau County ranks relatively low at 47<sup>th</sup>, 30<sup>th</sup> and 46<sup>th</sup> respectively for these three products. However, Juneau County ranks in the top 10 counties (by Value of Sales) for fruits nuts and berries and for other crops (potatoes and peanuts etc.) (US Department of Agriculture, 1997).

1997 Top 5 Commodities by Value of Sales				
Juneau County	Wisconsin			
1. Dairy products	47	1. Dairy Products		
2. Fruits, nuts, berries	4	2. Cattle and calves		
3. Corn for grain	30	3. Corn for grains		
4. Other crops -Potatoes, peanuts, etc.	8	4. Soybeans		
5. Cattle and calves	46	5. Poultry & Poultry Products		

Source: (US Department of Agriculture, 1997)

## **Market Value of Agricultural Products**

From 1992 to 1997, Juneau County experienced decreases in the overall market value of agricultural products sold (-6%) and the average market value per farm (-3%). By contrast, the state experienced increases in each of these categories as shown in the following table (US Department of Agriculture, 1997).

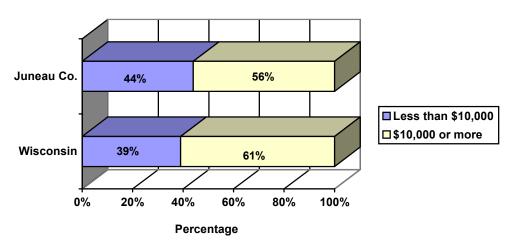
Percentage change market value of agricultural products From 1992 to 1997				
	Juneau County	Wisconsin		
Market value of agricultural products sold	-6%	+6%		
Market value of agricultural products sold,	-3%	+10%		
average per farm				

Source: (US Department of Agriculture, 1997)

#### **Value of Farm Sales**

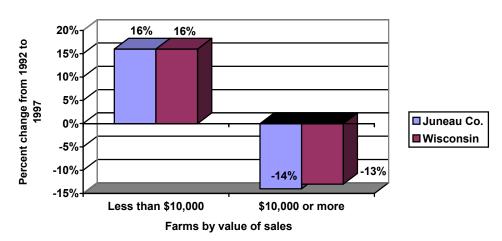
Over half of farms in Juneau County (56%) had \$10,000 or more by Value of Sales in 1997. The state level was 61% as shown in the following graph (US Department of Agriculture, 1997).

#### Precentage of Farms by Value of Sales



Source: (US Department of Agriculture, 1997)

The percentage of farms with Value of Sales at less than \$10,000 grew for Juneau County between 1992 and 1997. This was accompanied by a decrease in the percentage of farms with Value of Sales over \$10,000. This is similar to the statewide trend as shown by the following chart (US Department of Agriculture, 1997).



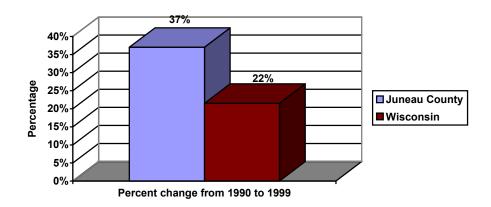
Change in Farm Value of Sales From 1992 to 1997

Source: (US Department of Agriculture, 1997)

## Nonfarm employment

Although farming has decreased in Juneau County according to some measures, nonfarm employment has grown. Juneau County's nonfarm employment increased by 37% from 1990 to 1999. The is very high compared to the state, which grew by 22% for the same time period (US Census, 2000).

Change in Nonfarm Private Employment from 1990 to 1999



Source: (US Census, 2000)

#### PAH Interview Results – Juneau County Farmers' Health and Insurance

The first five questions asked of the interviewees were specifically geared towards understanding farmers' health and insurance issues in Juneau County. The results of this part of the interview are reported here.

#### **Local health care system**

When asked if the needs of farmers and their families were adequately addressed in the local health care system, half of all respondents said "yes."

The cost of health care and insurance was the most frequently cited challenge by those interviewees who said, "No, the local health care system is not adequately meeting the health needs of farmers."

#### Major health and health care issues

Interviewees were then asked to list the three major health and health care issues or needs of farmers and farm families in their counties. The most common responses were:

- High cost of health insurance including high premiums, deductibles and co-pays, or lack of affordable insurance.
- High cost of health care services.
- Stress.
- Lack of time or willingness to go to doctor. Or perception that there is no need to go to the doctor.

The rest of the responses can be grouped into three categories: Chronic health conditions, prevention and farm safety and miscellaneous issues.

- 1. Chronic health conditions
  - Heart disease and related issues such as high blood pressure, cholesterol
  - Lung cancer and respiratory health
  - Skin cancer
- 2. Prevention and farm safety
  - Lack of education on the risks of pesticide use
  - Lack of preventive care and wellness checks
  - Child safety on the farm (Children on tractors, etc.)
- 3. Miscellaneous
  - Need access to specialists
  - No retirement for farmers

## **Barriers to obtaining health care services**

Interviewees were asked to list three major barriers to obtaining health care services for farmers and their families. Almost all of the interviewees said that the high cost of insurance or lack of insurance was one of the biggest barriers for farmers. And, many interviewees said that high cost of health care services was a barrier.

Interviewees cited several issues related to farm life and farmers' own perceptions of their health needs that posed barriers.

- Farmers need to take advantage of days with good weather for farming activities. This makes scheduling appointments in advance difficult because one cannot predict which days will be good weather and which ones would be good to visit the doctor.
- Farmers may feel that they are too busy to take time out from demands of farm life for medical care, especially if it is routine care like check-ups.
- Farmers tend not to pursue health concerns if there is not good continuity of care, that is if they cannot get back to see their own doctor for follow-up.
- Farmers may not perceive a need to go to the doctor especially for preventive care, or they may choose not to go due to pride or a sense of independence.

There were also some people who felt that issues related to the health care system itself posed barriers. These types of responses are listed below.

- HMOs take farmers out of the county to more urban areas like La Crosse where physicians don't understand farmers' health issues.
- At certain times of the year the ER is the only option for care, and the ER is reluctant to see people.
- Some insurance carriers seem disreputable.
- Lack of evening and weekend care encourages people to use the ER, which drives up the cost of care.

#### Farmers' experience with health insurance

Interviewees were asked to describe farmers' overall experience with health insurance such as how farm families tend to get access to health insurance.

Interviewees discussed five health insurance options for farmers:

- Farmer or spouse has insurance through off-farm employment
- Farmer purchases insurance through private market
- Farmer has no health insurance
- Farmer is insured through Medicare
- Farmer has insurance through farm cooperative or corporation (limited availability)

#### Off-farm employment

Most of the interviewees felt that the most common way that farmers obtained health insurance was through the farmers' own off-farm employment or a spouses' off-farm employment. While many interviewees felt that this was perhaps the best method for farmers to access insurance, some also expressed related challenges. For example, it may be difficult to find a part-time job with good benefits such as insurance coverage. Interviewees felt that young farm families with dependent children were the most likely to choose this option, since it is very important for families with children to have access to health services.

#### Private market

Most interviewees agreed that purchasing insurance through the private market is difficult, discouraging and/or cost prohibitive. Interviewees felt that the premiums were often very high, from \$400- 800 for single coverage and \$1,000 - \$2,000 for family coverage. Likewise, deductibles and co-pays are very high. Others opt for major medical coverage, which tends to be less expensive and covers only catastrophic events.

When farmers do buy insurance through the private market, they feel they must be wary of the legitimacy of the insurance carrier and whether or not the carrier will drop them or raise their fees. *No insurance* 

Many farmers and farm families forgo insurance altogether. Interviewees felt that older farmers who were not yet eligible for Medicare or those without dependents in the household were more

likely to be uninsured. Interviewees said that insurance premiums for older farmers, especially those with chronic health conditions, could be as high as \$2,000 per month.

#### Medicare, farm cooperatives and corporations

Some interviewees said that farmers were able to buy insurance through the dairy co-op in the past. This option appears to be very limited today. Additionally, insurance through co-ops may still be expensive and may not provide coverage for prescriptions. There are also limited opportunities for cranberry farmers to buy insurance through a corporation if the corporation owns the bogs that they work.

Some interviewees said that elderly farmers may have Medicare, but none discussed this option in depth.

#### Access to affordable health insurance

Interviewees were asked if they felt that farmers had access to affordable insurance. Many of the interviewees said "No" farmers do not have access to affordable insurance. Some felt that premiums represented a high percentage of farmer income, and that farmers might purchase major medical plans that do not cover preventative services.

Other interviewees felt that affordable insurance was available to farmers, but it was difficult access. For example, the farmer or the farmer's spouse would need to work off the farm to get employer-based insurance at an affordable cost.

When asked what they thought prevented farmers from being able to access affordable insurance, the majority again cited the high cost of health insurance. Interviewees offered the following insights about health insurance for farmers and their families:

- Farming is a high-risk profession, which drives up the cost of insurance policies.
- The average age of farmers may be high, which makes them a high-risk group.
- The farm economy has had tight margins, so farmers do not have extra cash to pay for premiums.
- It is hard for a family milking 50-60 cows to pay \$1,000-\$1,200 in premiums, but it is easier if you have 1,000 cows.
- Farmers don't purchase insurance as a group so they do not get group rates, which tend to be lower. Even through the dairy cooperative, there are not enough farmers to get good group rates.
- Even when farmers do purchase insurance policies, the carriers may cancel the policies.

#### PAH Interview Results - Partners in Agricultural Health

The second set of questions was specifically about the Partners in Agricultural Health Project. Seven of the ten Juneau County interviewees had heard of PAH before they were contacted for the interview. The remainder of the report represents the responses only for these 7 people. In general, the farmers interviewed had heard of the PAH program but had only participated in isolated events. The non-farmers who were familiar with PAH had either participated in some of the planning meetings or distributed information about PAH through their work with farmers.

#### **PAH Strengths**

The interviewees were asked to state the strengths of the PAH Project or aspects of the project that had been particularly successful or useful. Health screenings was the most common response. Screenings were viewed both as a grassroots service to farmers and as an important step towards helping farmers assess their own health. Interviewees appreciated that screenings were held at convenient times and at events farmers attended regularly.

Other strengths named by interviewees named included the following:

- Educational materials and opportunities.
- Support given to other professionals who work with farmers (such as educational brochures, bulletin boards, speakers, support for Parish Nurses, etc.).
- Opportunity to network with others concerned with farmers' health.
- Training provided to health care professionals about farmers' health.
- Specific events (such as Rural Women's Getaway).

#### **PAH** weaknesses and challenges

When asked if the PAH project had any weaknesses, challenges or problems, interviewees focused on three issues: 1) the continuity of the program; 2) staff turnover; and 3) follow-up to screenings. Some interviewees speculated that PAH's financial dependence on grant money made it difficult for the program to maintain services and consistency. Interviewees also felt that the staff change in the beginning of the program set it back because the new coordinators had to start over in terms of getting to know the farm communities. Another major concern was the fact that there was not enough follow-up for farmers who identified potential health issues at screenings.

#### **Future of PAH**

Interviewees were then asked how the PAH program should proceed after the grant funding ends in May 2003. The most common responses were that screenings and farmer education should be continued.

Otherwise, interviewee comments varied. Only one interviewee cited each of the following issues:

- Continue to use parish nurses to get information out to farmers.
- Continue partnering with hospitals so that farmers can continue to get hospital-based services (like the back assessments and farm safety clinics).
- Continue screenings and distribution of promotional materials.
- Partner with WWTC to train EMS providers.
- Change the times of the educational programs because 7:00am is too early for dairy farmers.
- Develop a free clinic where health professionals volunteer one time each week to see patients without insurance.
- Offer dental services.

• Offer vision tests and services.

Interviewees were then asked how much they would be willing to pay for the services offered by PAH. The majority of the interviewees said that they did not think that farmers would be willing to pay for the services. The fact that the services were free made them more accessible and appealing. Some felt that farmers may be willing to pay a "nominal" fee. Only two people were willing to state an actual dollar amount. These people said that farmers would be willing to pay:

- \$5-10 for blood checks.
- \$15 for screenings.

#### **Implications**

Key informant interviews with 10 residents of Juneau County revealed that many local farmers do not have adequate access to affordable health insurance, which limits farmers' ability to access appropriate health care services. There is also a perception that farmers are facing challenging health circumstances. In general, farmers are thought to be aging, experiencing high stress levels, exposed to daily farm safety hazards and particularly affected by heart disease and cancer. The combination of limited access to health services and challenging health conditions continue to make farmers a vulnerable population.

Young farmers with children and older farmers without dependents in the household face different health and insurance issues. Young farm families are more apt to seek out off farm employment in order to access employer-based insurance. This adds extra stress because one family member is unavailable to work the farm. Older farmers, on the hand, may be forced to forego insurance coverage because the cost is too high. This leaves them in a precarious situation should they become ill. While interviewees were quite articulate about expressing problems with insurance, solutions to the problems were less forthcoming.

Without outside solutions, farmers' health issues may fall to the local health system. The local health care system has recognized that farmers' health is a priority issue, as evidenced by Juneau County's participation in PAH. And, the local health care system is generally considered to be good by interviewees. However, it is not always flexible enough to accommodate farmers' needs. According to interviewees, farmers may need to make late afternoon, evening or weekend medical appointments. PAH's free screenings and educational outreach efforts, which were often held in conjunction with farmers' events and in the evenings or early mornings, appear to have met some of the farmers' scheduling needs. Still, without appropriate follow-up to screenings, farmers may not be getting the full range of services they need. Continued efforts to expand clinic hours, expand services targeted to farmers, expand low cost services or advertise current services more broadly may be necessary. Attention to continuity of care and follow-up to screenings is also very important.

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#### **Appendix**

#### **PAH Questionnaire**

1.	Do you feel that the needs of farmers	and their families	are adequately a	addressed in the
	current health care system located in	County?	Please explain.	If not, how can it be
	improved?			

- 2. What do you think are the three major health and health care issues/needs of farmers and farm families in this county at this time?
- 3. What would you say are three major barriers to obtaining health care services for farmers and their families?
- 4. Based on your knowledge, tell me about the experience of farmers and their families in the tri-county area seeking health insurance coverage. What is the source of most of this insurance?
- 5. Do you feel that farm families have adequate access to affordable health insurance? If not, what prevents access to affordable health insurance?
- 6. Have you been involved with the planning and implementation or have you used the services of the Partners in Agricultural Health Project? If involved in planning/implementation, how long and in what capacity?

If the answer to # 5 is no, the interview is over. Go to Question #9. If the answer is yes, please continue with the next questions.

- 7. What, if any, are the strengths of the PAH project or aspects of the project that have been successful or useful?
- 8. Are there weaknesses, challenges, or problems with the PAH project? If yes, please explain.
- 9. The funding for Partners in Agricultural Health will be ending in May. Where should the program go from here? How much would you be willing to pay for the services offered by PAH?
- 10. Do you have any additional comments related to the health care in \_\_\_\_\_ County, health insurance, or the Partners in Agricultural Health Project?

For more information about grant writing or conducting community needs assessments, contact:

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